

SOLUSI SQUARE 1:

STEP 1: Mengembalikan Square 1 yg bentuknya acak2an kebentuk kubus.

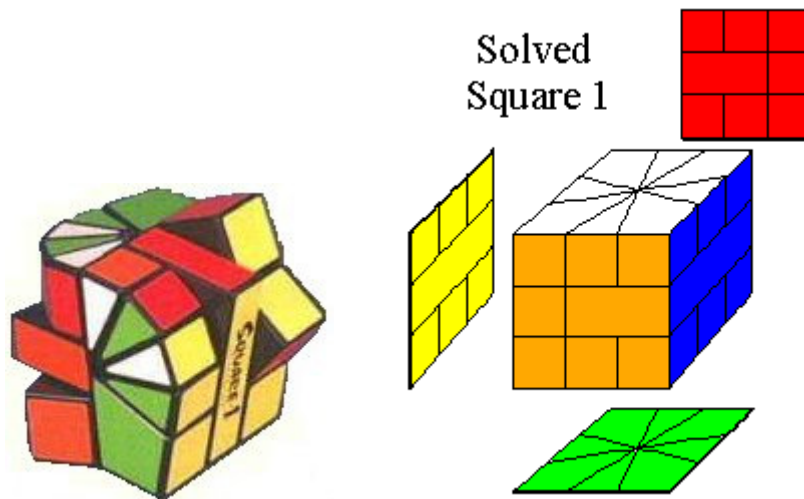
STEP 2: Mengumpulkan kedelapan bh corner pieces pada bidang/layer masing2 tanpa memperhatikan posisinya. Untuk jelasnya: keempat corner pieces yg mengandung warna putih, harus berada di layer atas (Top layer), dan keempat corner pieces yg mengandung warna hijau, harus berada pada layer bawah (Bottom layer), soal posisinya terbalik balik tdk masalah, karena akan diselesaikan pada step berikutnya.

STEP 3: Memposisikan corner pieces.

STEP 4: Memposisikan edge pieces.

STEP 5: Menyelesaikan Parity error, jika ada.

STEP 6: Menyelesaikan Lapisan tengah (Middle layer), jika diperlukan.



NOTASI:

t : bidang atas (top)

b: bidang bawah (bottom)

R: bidang sebelah kanan (Right) yg putarannya selalu 180 derajat.

0: diputar 0 derajat (tidak diputar).

1: diputar 30 derajat Clockwise (CW), -1: diputar 30 derajat Counter Clockwise (CCW)

2: diputar 60 derajat CW, -2: diputar 60 derajat CCW.

3: diputar 90 derajat CW, -3: diputar 90 derajat CCW.

dst. (setiap angka pertambahannya 30derajat)

9: diputar 270 derajat CW, -9: diputar 270 derajat CCW.

Contoh: t3 artinya top layer diputar90 derajat CW.

b-1 artinya bottom layer diputar 30 derajat CCW.

b0 artinya bottom layer diputar 0 derajat (tidak diputar).

STEP 1: Mengembalikan Square 1 yg bentuknya acak2an kebentuk kubus.

Rumus-rumus yang dipakai:

Cari bentuk yang sama dengan gambar dibawah ini, kemudian lakukan putaran R (180derajat).

Top Bottom



Pair 83

next is 78, distance is 7 ?



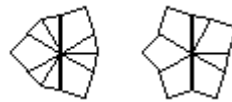
Pair 1

next is 6, distance is 6 ?



Pair 3

next is 36, distance is 6 ?



Pair 33

next is 26, distance is 6 ?



Pair 34

next is 14, distance is 6 ?



Pair 70

next is 43, distance is 6 ?



Pair 71

next is 49, distance is 6 ?



Pair 72

next is 39, distance is 6 ?



Pair 73

next is 40, distance is 6 ?



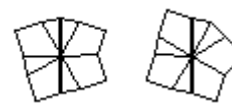
Pair 76

next is 53, distance is 6 ?



Pair 77

next is 36, distance is 6 ?



Pair 78

next is 49, distance is 6 ?



Pair 79

next is 50, distance is 6 ?



Pair 82

next is 53, distance is 6 ?



Pair 85

next is 36, distance is 6 ?



Pair 86

next is 47, distance is 6 ?



Pair 88

[next is 65](#), distance is 6 ?



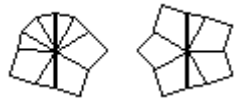
Pair 6

[next is 8](#), distance is 5 ?



Pair 7

[next is 0](#), distance is 5 ?



Pair 10

[next is 11](#), distance is 5 ?



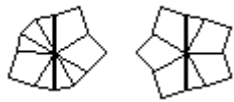
Pair 12

[next is 8](#), distance is 5 ?



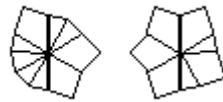
Pair 14

[next is 8](#), distance is 5 ?



Pair 16

[next is 11](#), distance is 5 ?



Pair 18

[next is 8](#), distance is 5 ?



Pair 22

[next is 9](#), distance is 5 ?



Pair 25

[next is 9](#), distance is 5 ?



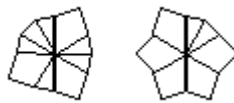
Pair 26

[next is 9](#), distance is 5 ?



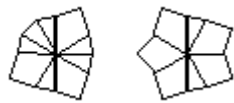
Pair 28

[next is 15](#), distance is 5 ?



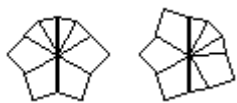
Pair 29

[next is 8](#), distance is 5 ?



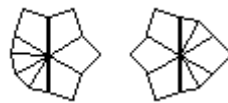
Pair 31

[next is 11](#), distance is 5 ?



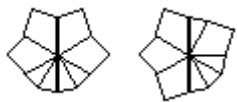
Pair 36

[next is 20](#), distance is 5 ?



Pair 37

[next is 2](#), distance is 5 ?



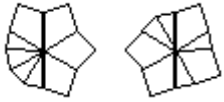
Pair 38

[next is 8](#), distance is 5 ?



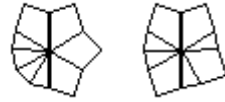
Pair 39

[next is 8](#), distance is 5 ?



Pair 40

[next is 8](#), distance is 5 ?



Pair 43

[next is 8](#), distance is 5 ?



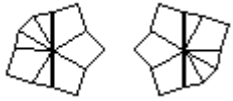
Pair 44

[next is 9](#), distance is 5 ?



Pair 46

[next is 8](#), distance is 5 ?



Pair 47

[next is 4](#), distance is 5 ?



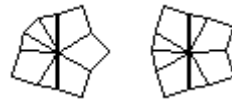
Pair 48

[next is 11](#), distance is 5 ?



Pair 49

[next is 15](#), distance is 5 ?



Pair 50

[next is 11](#), distance is 5 ?



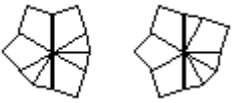
Pair 51

[next is 8](#), distance is 5 ?



Pair 53

[next is 24](#), distance is 5 ?



Pair 55

[next is 8](#), distance is 5 ?



Pair 57

[next is 15](#), distance is 5 ?



Pair 58

[next is 27](#), distance is 5 ?



Pair 59

[next is 11](#), distance is 5 ?



Pair 60

[next is 15](#), distance is 5 ?



Pair 63

[next is 17](#), distance is 5 ?



Pair 65

[next is 17](#), distance is 5 ?



Pair 66

[next is 19](#), distance is 5 ?



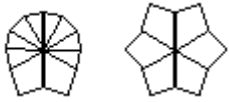
Pair 67

next is 15, distance is 5 ?



Pair 68

next is 24, distance is 5 ?



Pair 0

next is 35, distance is 4 ?



Pair 2

next is 45, distance is 4 ?



Pair 4

next is 35, distance is 4 ?



Pair 5

next is 35, distance is 4 ?



Pair 8

next is 41, distance is 4 ?



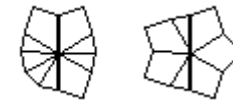
Pair 9

next is 41, distance is 4 ?



Pair 11

next is 35, distance is 4 ?



Pair 13

next is 41, distance is 4 ?



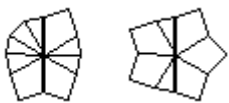
Pair 15

next is 45, distance is 4 ?



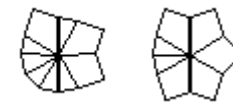
Pair 17

next is 35, distance is 4 ?



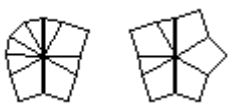
Pair 19

next is 41, distance is 4 ?



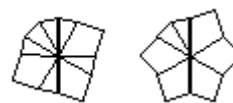
Pair 20

next is 41, distance is 4 ?



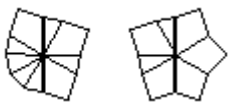
Pair 21

next is 41, distance is 4 ?



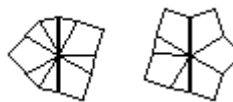
Pair 23

next is 45, distance is 4 ?



Pair 24

next is 41, distance is 4 ?



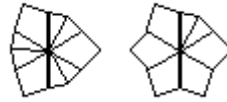
Pair 27

next is 61, distance is 4 ?



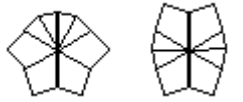
Pair 30

next is 61, distance is 4 ?



Pair 32

next is 54, distance is 4 ?



Pair 42

next is 54, distance is 4 ?



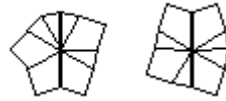
Pair 52

next is 61, distance is 4 ?



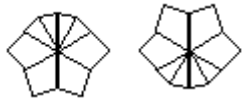
Pair 56

next is 41, distance is 4 ?



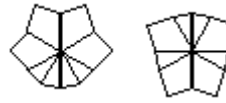
Pair 64

next is 61, distance is 4 ?



Pair 35

next is 84, distance is 3 ?



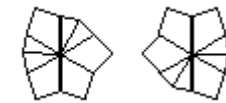
Pair 41

next is 75, distance is 3 ?



Pair 45

next is 75, distance is 3 ?



Pair 54

next is 84, distance is 3 ?



Pair 61

next is 75, distance is 3 ?



Pair 62

next is 75, distance is 3 ?



Pair 69

next is 84, distance is 3 ?



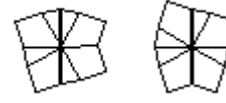
Pair 74

next is 75, distance is 3 ?



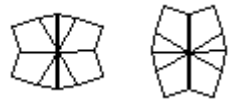
Pair 81

next is 75, distance is 3 ?



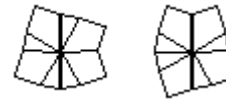
Pair 75

next is 80, distance is 2 ?



Pair 84

next is 80, distance is 2 ?



Pair 87

next is 80, distance is 2 ?



Pair 80

next is 89, distance is 1 ?



Pair 89

no next: distance is 0 ?

Selesai Step 1, Square 1 yg bentuknya acak2an sekarang sudah kembali menjadi bentuk kubus, namun warnanya masih belum seragam.

STEP 2: Mengumpulkan kedelapan bh corner pieces pada bidang/layer masing2 tanpa memperhatikan posisi dan orientasinya. Untuk jelasnya: keempat corner pieces yg mengandung warna putih, harus berada di layer atas (Top layer), dan keempat corner pieces yg mengandung warna hijau, harus berada pada layer bawah (Bottom layer), soal posisi dan orientasinya terbalik balik tdk masalah, karena akan diselesaikan pada step berikutnya.

Rumus2 yang dipakai:



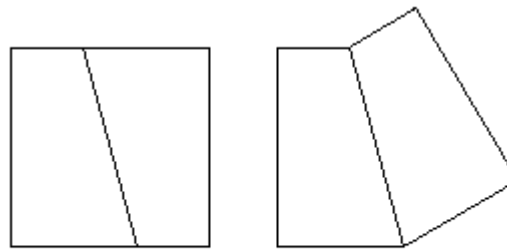
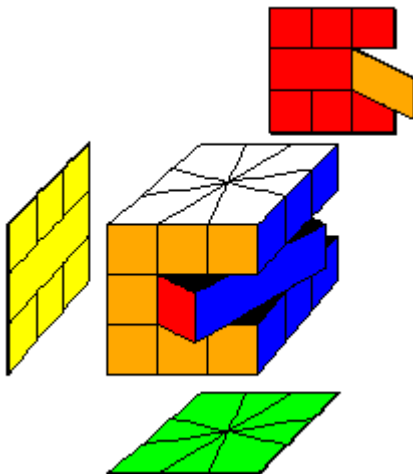
Pair 80

next is 89, distance is 1 ?



Pair 89

no next: distance is 0 ?

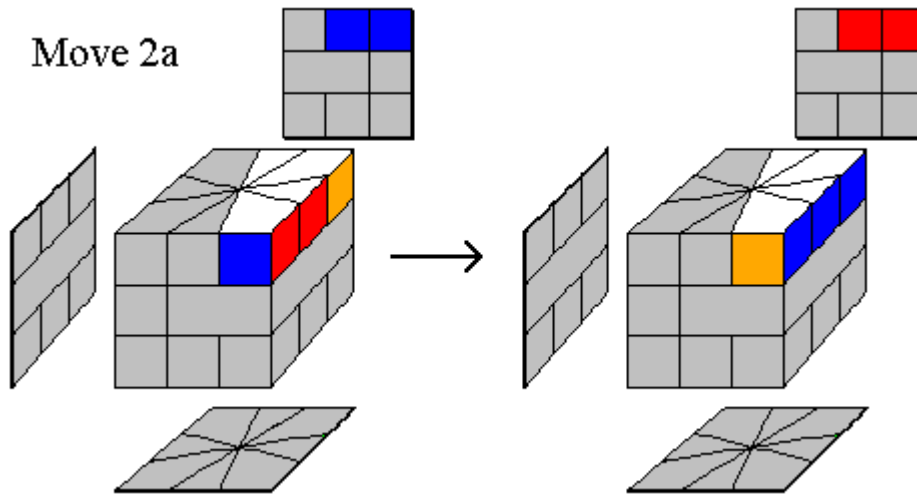


Middle Layer Orientations

Move 5:
R t6 R t6 R t6
Note: t6 = 180°

STEP 3: Memposisikan corner pieces.

Rumus rumus yang dipakai:

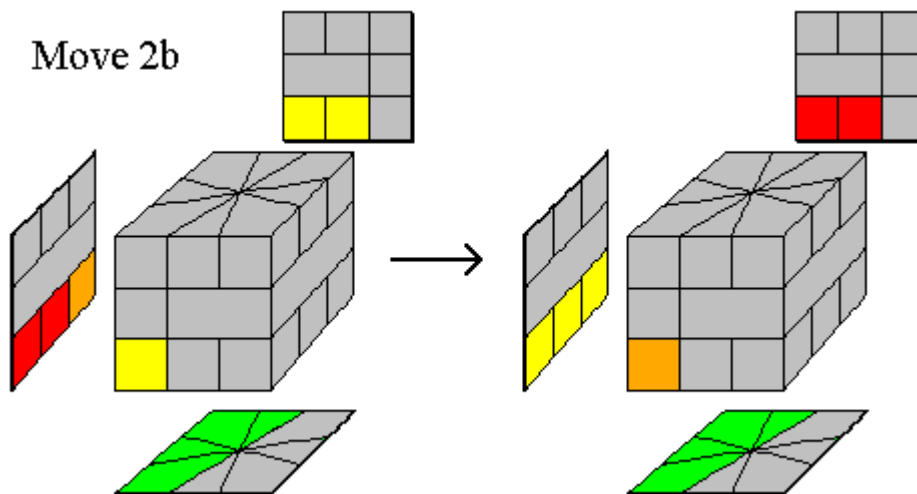


Move 2a: T(t3,b0) b9 T(t3,b0) t9 T(t9,b3) t9

t1 R t3 b0 R t-1 b9

In detail: t1 R t3 b0 R t-1 t9

t1 R t9 b3 R t-1 t9

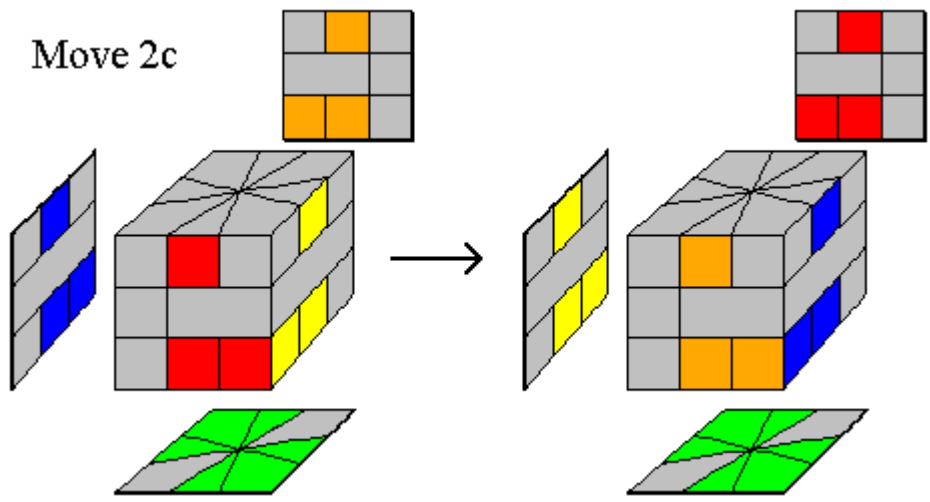


Move 2b: T(t3,b0) b9 T(t9,b3) b9 T(t3,b0) t9

t1 R t3 b0 R t-1 b9

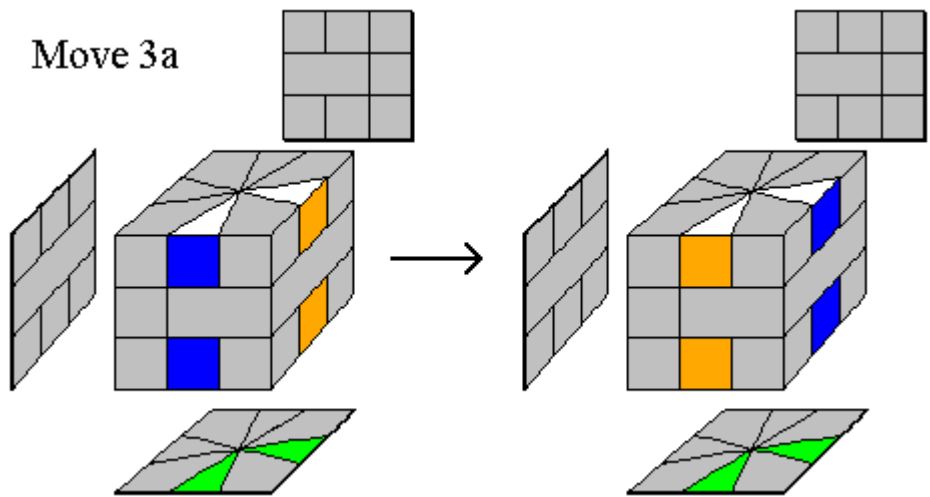
In detail: t1 R t9 b3 R t-1 b9

t1 R t3 b0 R t-1 t9



R t3 b3 R t-1 b-2
 Move 2c: R t2 b2 R b6
 R t-2 b-2 R t1 b2
 R t-3 b-3 R

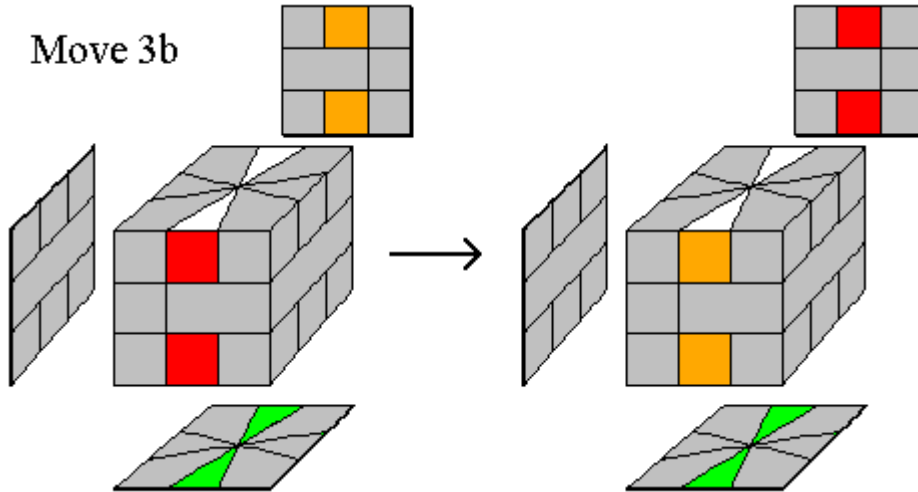
STEP 4: Memposisikan edge pieces.
 Rumus rumus yang dipakai:



Tukar tempat antar sesama edge pieces pada top layer dan tukar tempat antar sesama edge pieces pada bottom layer.

Move 3a: t3 b6 B(t6,b0) b9 T(t6,b0) b6 B(t3,b0) t9
 In detail:
 t3 b6
 b-1 R t6 R b1 b9
 t1 R t6 R t-1 b6
 b-1 R t3 R b1 t9

Move 3b

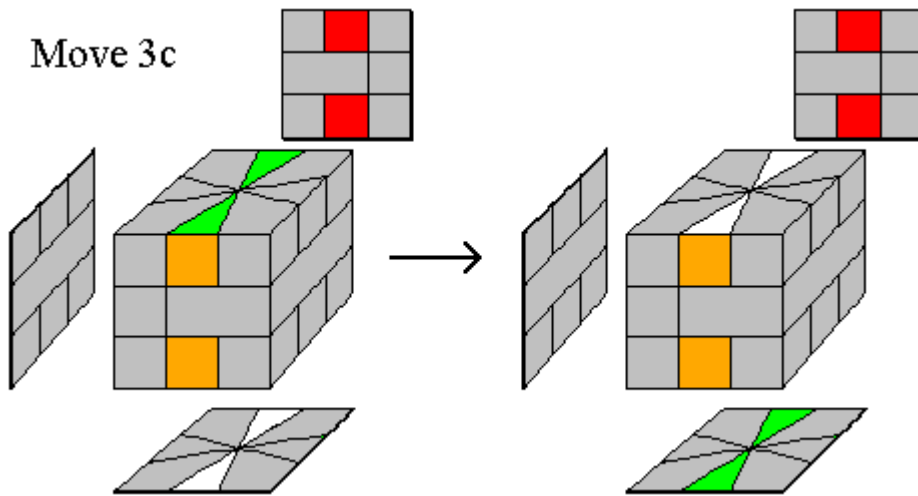


Tukar tempat antar sesama edge pieces pada top layer, dan tukar tempat antar sesama edge pieces pada bottom layer.

Move 3b: T(t6,b0) b6 B(t6,b0) b6 T(t6,b0) b6

In detail:
 t1 R t6 R t-1 b6
 b-1 R t6 R b1 b6
 t1 R t6 R t-1 b6

Move 3c

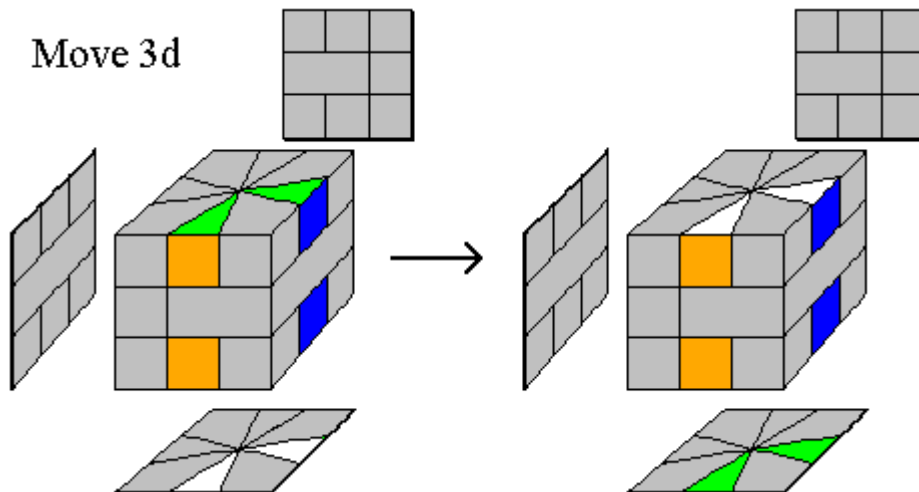


Tukar tempat antar edge pieces top layer dengan edge pieces bottom layer.

Move 3c: T(t0,b6) B(t0,b6)

In detail:
 t1 R t0 b6 R t-1
 b-1 R t0 b6 R b1

Move 3d



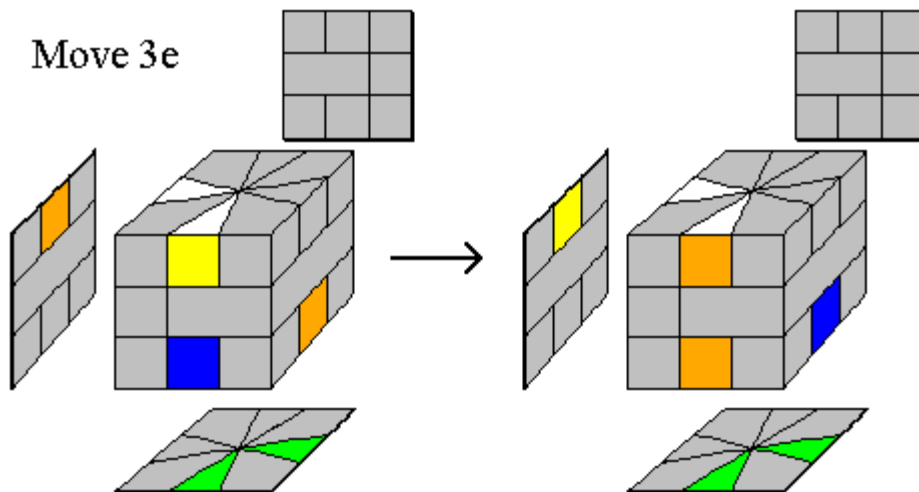
Tukar tempat antar edge pieces top layer dengan edge pieces bottom layer.

Move 3d: t3 b6 B(t6,b0) b3 T(t6,b0) b6 B(t9,b0) t9

In detail:

	t3	b6			
b-1	R	t6	R	b1	b3
t1	R	t6	R	t-1	b6
b-1	R	t9	R	b1	t9

Move 3e



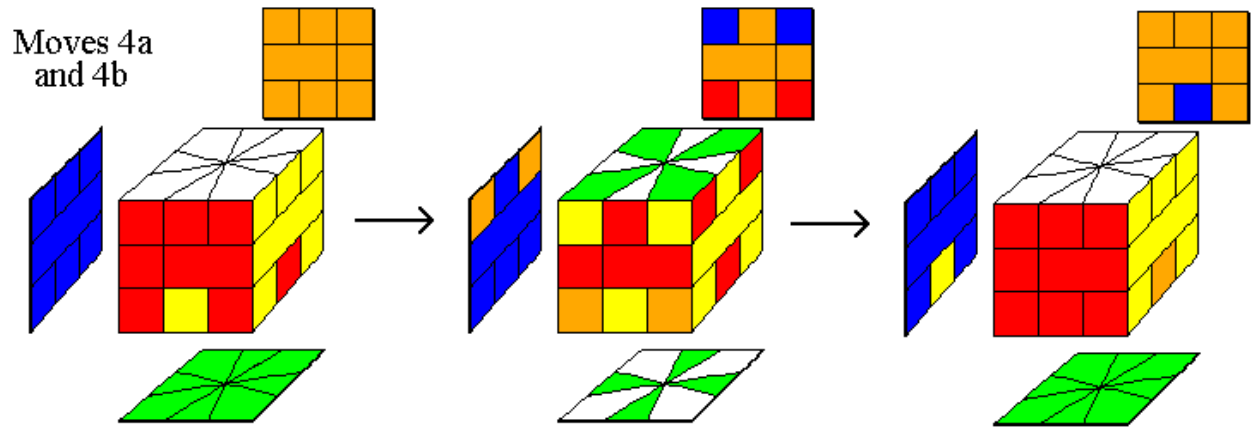
Tukar tempat antar sesama edge pieces top layer dan tukar tempat antar sesama edge pieces bottom layer.

Move 3e: B(t9,b0) b6 T(t6,b0) b3 B(t6,b0) b6

In detail:

b-1	R	t9	R	b1	b6
t1	R	t6	R	t-1	b3
b-1	R	t6	R	b1	b6

STEP 5: Menyelesaikan Parity error, jika ada.
Rumus yang dipakai:

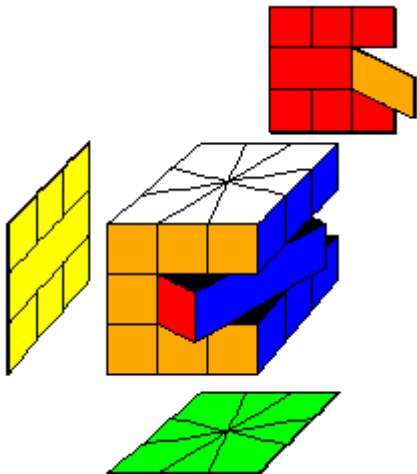


Move 4a: $R\ t^{-3}\ b^{-3}\ R\ t^{-2}\ b^{-1}\ R$
 $t^{-2}\ b^{-2}\ R\ b^{-2}\ R\ t^{-2}\ b^{-2}$
 $R\ t^{-2}\ b^{-1}\ R\ t^3\ b^3\ R$

Move 4b: $b^{-1}\ R\ t^{-3}\ b^{-3}\ R\ b^1$
 $t^1\ R\ t^{-3}\ b^{-3}\ R\ t^2$

Lanjutkan dengan menggunakan rumus 3a (2kali).

STEP 6: Menyelesaikan lapisan tengah (Middle layer), jika diperlukan.
Rumus yang dipakai:



Move 5:
 $R\ t_6\ R\ t_6\ R\ t_6$
 Note: $t_6 = 180^\circ$