Nama   : Adinda Nur Agustin

NPM   : G1F021051

Algoritma Dan Struktur Data

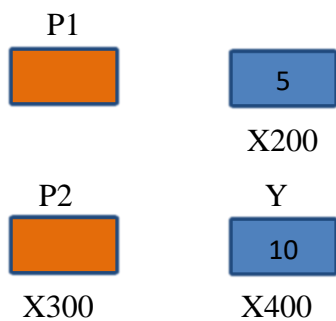- Exercise 1
  Dictionary : X, Y   = Integer
                P1, P2 = pointer to integer
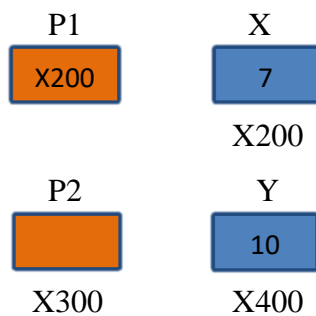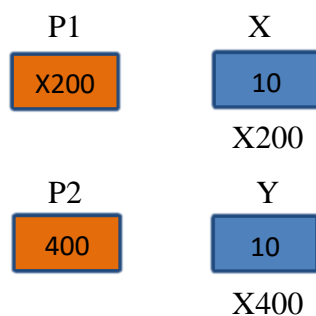 Algorithm :
  X ← 5
  Y ← 10

  P1
  ┌──────────┐   ┌──────────┐
  │   │   │   5   │
  └──────────┘   └──────────┘
                            X200

  P2   Y
  ┌──────────┐   ┌──────────┐
  │   │   │   10   │
  └──────────┘   └──────────┘
     X300   X400

  1) P1 ← & X
         *P1 ← 7

     P1   X
  ┌──────────┐   ┌──────────┐
  │ X200   │   │   7   │
  └──────────┘   └──────────┘
                       X200

     P2   Y
  ┌──────────┐   ┌──────────┐
  │   │   │   10   │
  └──────────┘   └──────────┘
     X300   X400

  2) P2 ← & Y
         *P1 ← 7

     P1   X
  ┌──────────┐   ┌──────────┐
  │ X200   │   │   10   │
  └──────────┘   └──────────┘
                       X200

     P2   Y
  ┌──────────┐   ┌──────────┐
  │   400   │   │   10   │
  └──────────┘   └──────────┘
                       X400

3) X ← Y

  P1 ←& Y

  P2 ←& X

P1	X
X400	10
	X200

P2	Y
X200	10
	X400

4) P2 ← & Y

  P1 ←P2

  *P2 ← 6

P1	X
X200	6
	X200

P2	Y
X200	10
	X400
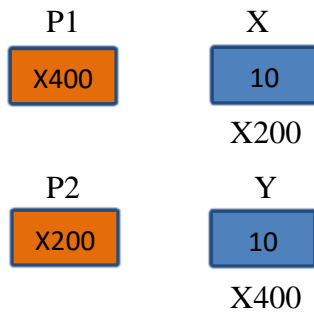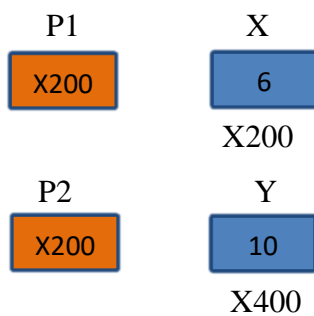
- Exercise 2

Algorithm :

X ← 5
Y ← 10

P1	
	5
X100	X200

P2	Y
	10
X300	X400

1) P2 ← & Y

  P2 ← & X

*P3 ← *P2

P1
X400

X
5
X200

P2
200

Y
5
X400

2) P2 ← & X

*P2 ← 7

*P1 ← P2

P1
X200

X
7
X200

P2
200

Y
5
X400

3) P2 ← & X

*P2 ← 7

*P1 ← P2

P1
X200

X
7
X200

P2
200

Y
5
X400
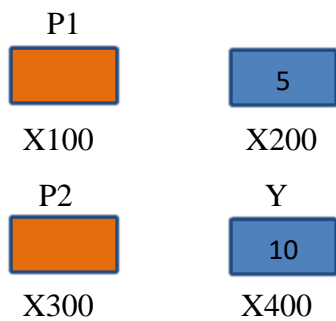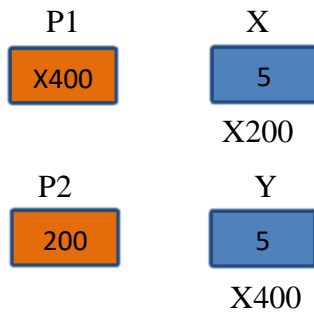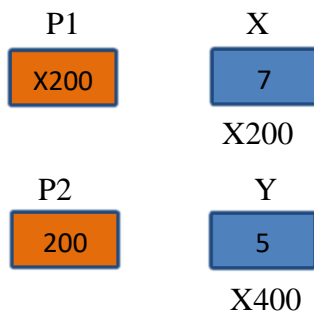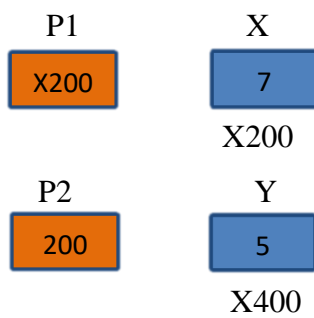
- Exercise 3

```
Nilai a : 10
Nilai b : 15
Nilai p1 : 0x6ffdec
Nilai p2 : 0x6ffdec
Nilai c : 27
Nilai p1 : 0x6ffde8
Nilai a : 27
Nilai p3 : 0x6ffdec
Nilai b : 8

--------------------------------
Process exited after 0.48 seconds with return value 0
Press any key to continue . . .
```

What Is The Output?					
A	B	C	P1	P2	P3
10	15	27	0x6ffdec	0x6ffdec	0x6ffdec
27	8		0x6ffde8		

- Exercise 4

```
Nilai a : 10
Nilai b : 15
Nilai c : 27
Nilai p1 : 0x6ffdf4
Nilai p2 : 0x6ffdf0
Nilai a : 27
Nilai a : 15
Nilai b : 6
Nilai p3 : 0x6ffdf0
Nilai p3 : 0x6ffdec
Nilai c : 27

--------------------------------
Process exited after 0.2294 seconds with return value 0
Press any key to continue . . .
```

What Is The Output?					
A	B	C	P1	P2	P3
10	15	27	0x6ffdf4	0x6ffdf0	0x6ffdf0
27	6	27		8	0x6ffdec