**Nama : Fadia Nur Shafitri**

**NPM : G1F021010**

**Algoritma dan Struktur Data**

*Exercise 1*

**Dictonary:**

x, y : integer

p1, p2 : Pointer to integer

**Algorithm:**

X 5

Y 10

P1 X

5

X100 x200

P2 Y

10

X200 X400

1. P1 &x

\*p1 7

P1 X

7

X200 X200

P2 Y

10

X300 X400

1. P2 &x

x \*p2

P1 X

X200

10

X200

P2 Y

X400

10

X400

1. x y

p1 &y

p2 &x

P1 X

X400

10

X200

P2 Y

X200

10

X400

1. x y

p1 &y

p2 &x

P1 X

X200

6

X200

P2 Y

X200

10

X400

*Exercise 2*

**Dictonary:**

x, y : integer

p1, p2 : Pointer to integer

**Algorithm:**

X 5

Y 10

P1 X

5

X100 x200

P2 Y

10

X300 X400

1. p1 &y

p2 &x

\*p1 \*p2

P1 X

x400

5

X200

P2 Y

X200

5

X400

1. p2 &x

\*p2 7

p1 p2

P1 X

X200

7

X200

P2 Y

X200

5

X400

1. p1 &x

\*p2 y

P1 X

X200

5

X200

P2 Y

X200

5

X400

*Exercise 3*

What Is The Output?

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| a | b | c | p1 | p2 | p3 |
| 10 | 15 | 27 | 0x6ffe1c | 0x6ffe1c | 0x6ffe1c |
| 27 |  |  | 0x6ffe18 | 0x6ffe1c |  |

*Exercise 4*

What Is The Output?

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| a | b | c | p1 | p2 | p3 |
| 10 | 15 | 27 | 0x6ffe24 | 0x6ffe20 | 0x6ffe20 |
| 15 | 6 |  | 0x6ffe24 |  | 0x6ffe1c |
|  |  |  | 0x6ffe24 |  |  |