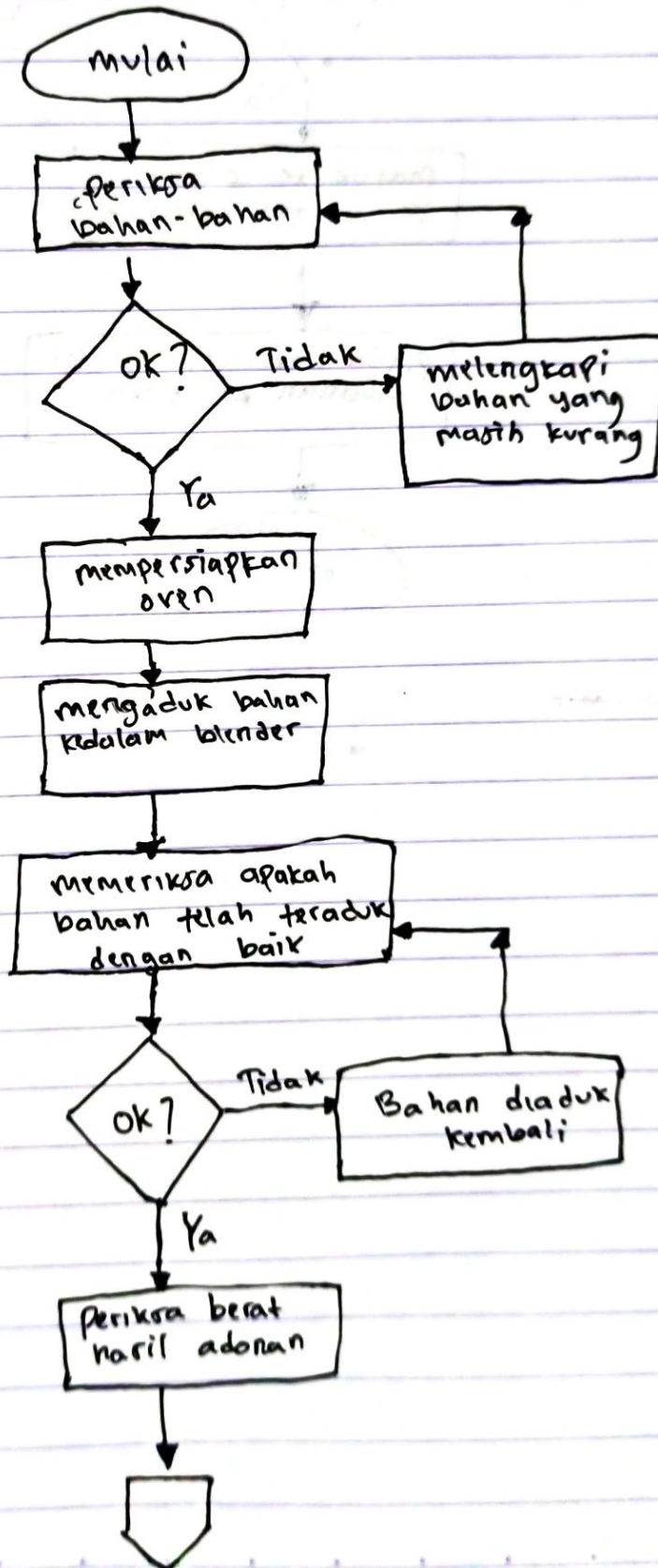
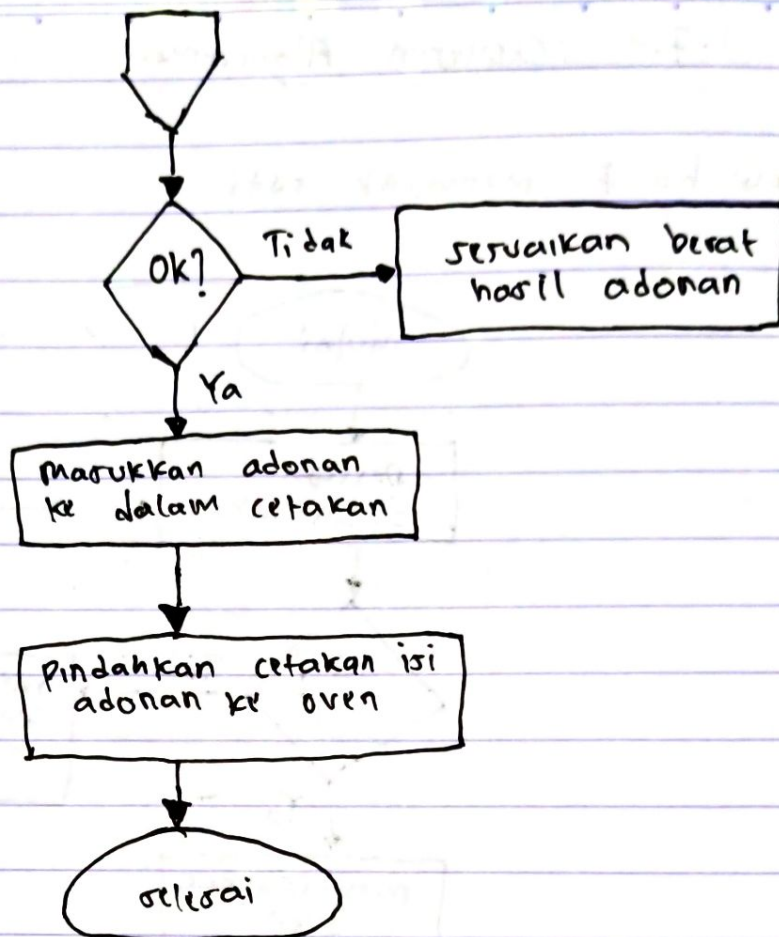


1.7.1 Menyusun Algoritma

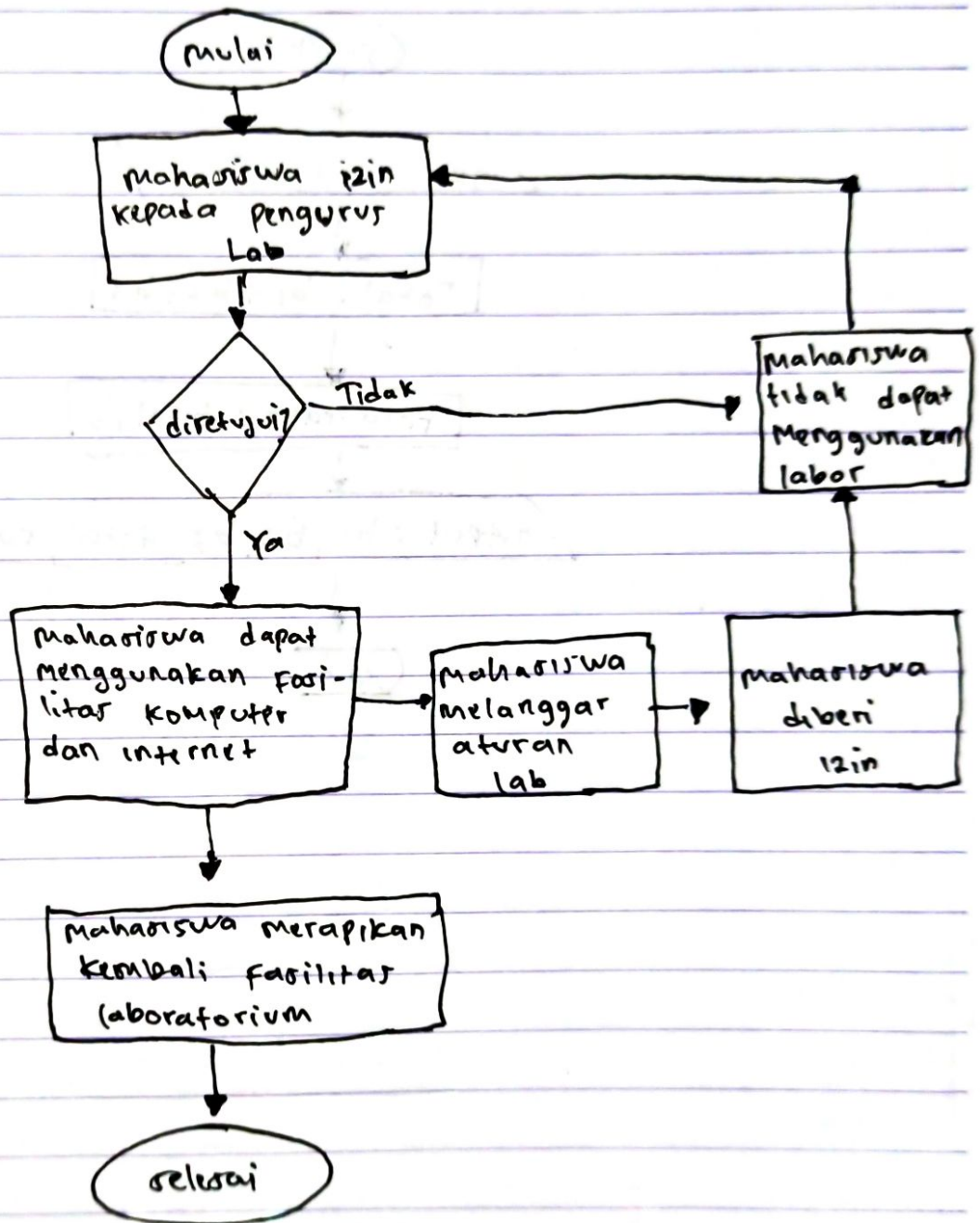
1. Flowchart memasak roti



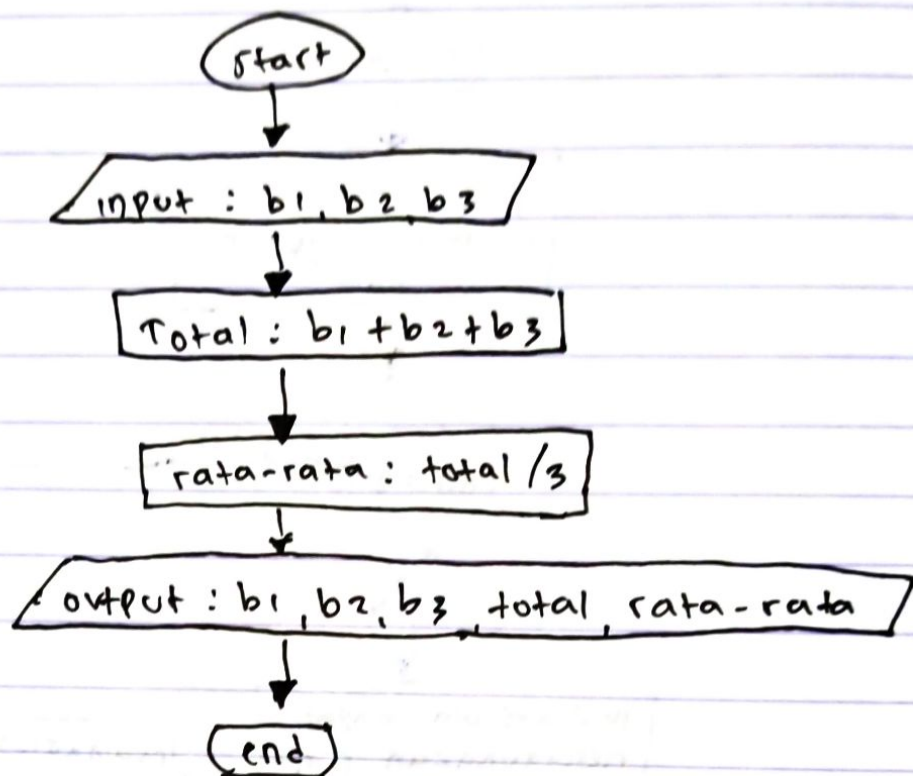


2. ~~Flowchart~~

2. flowchart "Menggunakan komputer di laboratorium".



3 flowchart menghitung rata-rata dari 3 buah bil.



1. 7. Latihan

Konversikan bil² brk:

1. $1980_{(10)}$, $1111011100_{(2)}$ (biner)

$$1980 / 2 = 990 \text{ sisa } 0$$

$$990 / 2 = 495 \text{ sisa } 0$$

$$495 / 2 = 247 \text{ sisa } 1$$

$$247 / 2 = 123 \text{ sisa } 1$$

$$123 / 2 = 61 \text{ sisa } 1$$

$$61 / 2 = 30 \text{ sisa } 1$$

$$30 / 2 = 15 \text{ sisa } 0$$

$$15 / 2 = 7 \text{ sisa } 1$$

$$7 / 2 = 3 \text{ sisa } 1$$

$$3 / 2 = 1 \text{ sisa } 1$$

$$1 / 2 = 0 \text{ sisa } 1$$

$1980_{(10)}$ $7Bc_{(16)}$ (Hexadecimal)

$$1980 / 16 = 123 \text{ sisa } 12 \text{ (C)}$$

$$123 / 16 = 7 \text{ sisa } 11 \text{ (B)}$$

$$7 / 16 = 0 \text{ sisa } 7$$

$1980_{(10)}$ $3674_{(8)}$ (oktaf)

$$1980 / 8 = 247 \text{ sisa } 4$$

$$247 / 8 = 30 \text{ sisa } 7$$

$$30 / 8 = 3 \text{ sisa } 6$$

$$3 / 8 = 0 \text{ sisa } 3$$

2. $\widehat{100100101}_{(2)}$ 589 $_{(10)}$ (Decimal)

$$\begin{aligned} 100100101 &= 1 \times 2^9 + 0 + 0 + 1 \times 2^6 + 0 + 0 + 1 \times 2^3 + 1 \times 2^2 + \\ &\quad 0 + 1 \times 2^0 \\ &= 512 + 64 + 8 + 4 + 1 \\ &= 589 \end{aligned}$$

$100100101_{(2)}$ 24D $_{(16)}$ (Hexadecimal)

$$(0010) = 2$$

$$(0100) = 4$$

$$(1101) = 8 + 4 + 1 = 13 = D$$

$100100101_{(2)}$ 115 $_{(8)}$ (Octal)

$$100 = 4$$

$$001 = 1$$

$$001 = 1$$

$$001 = 1$$



3. $76_{(10)} = 111110_{(2)}$ (Biner)

$7 = 111$

$6 = 110$

$76_{(10)} = 3E_{(16)}$ (Hexadesimal)

$7 = 111$

$6 = 110$

(111110)

$1110 = E$

$0011 = 3$

$76_{(8)} = 62_{(10)}$ (Desimal)

$$\begin{aligned} 76_{(8)} &= 7 \times 8^1 + 6 \times 8^0 \\ &= 56 + 6 \\ &= 62_{(10)} \end{aligned}$$

4. $43F_{(16)} = 01000011111_{(2)}$ (biner)

$4 = 0100$

$3 = 0011$

$F = 1111$

$$43F_{(16)} = 1087_{(10)} \quad (\text{decimal})$$

$$\begin{aligned} 43F_{(16)} &= 4 \times 16^2 + 3 \times 16^1 + 15 \times 16^0 \\ &= 1024 + 48 + 15 \\ &= 1087_{(10)} \end{aligned}$$

$$43F_{(16)} = 2077 \quad (\text{oktal})$$

$$4 = 0100$$

$$3 = 0011$$

$$F = 1111$$

$$0100.0011111$$

$$\begin{array}{l} 010 \\ \text{ET} \end{array} = 2$$

$$000 = 0$$

$$111 = 7$$

$$111 = 7$$