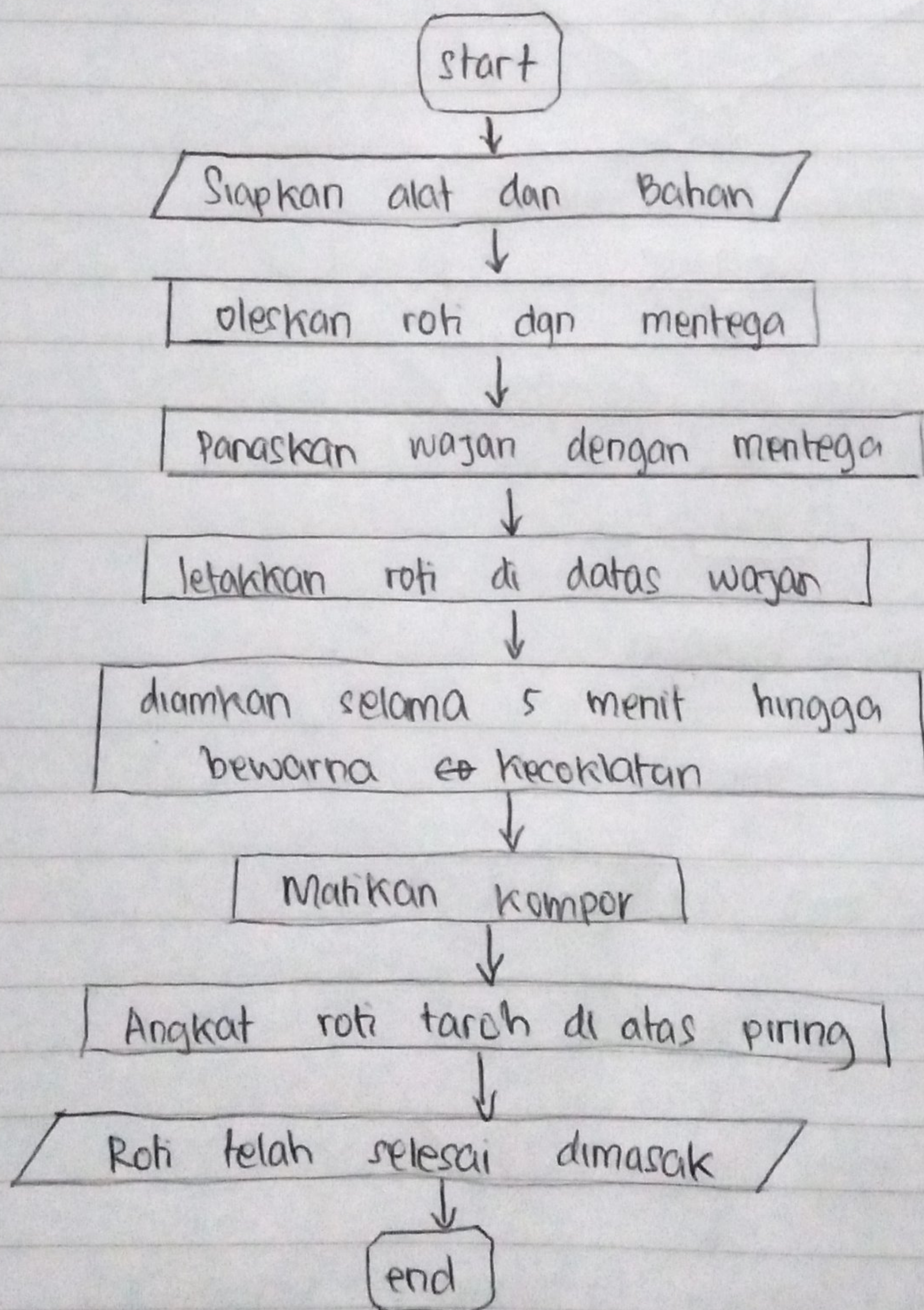


No. _____
Date _____

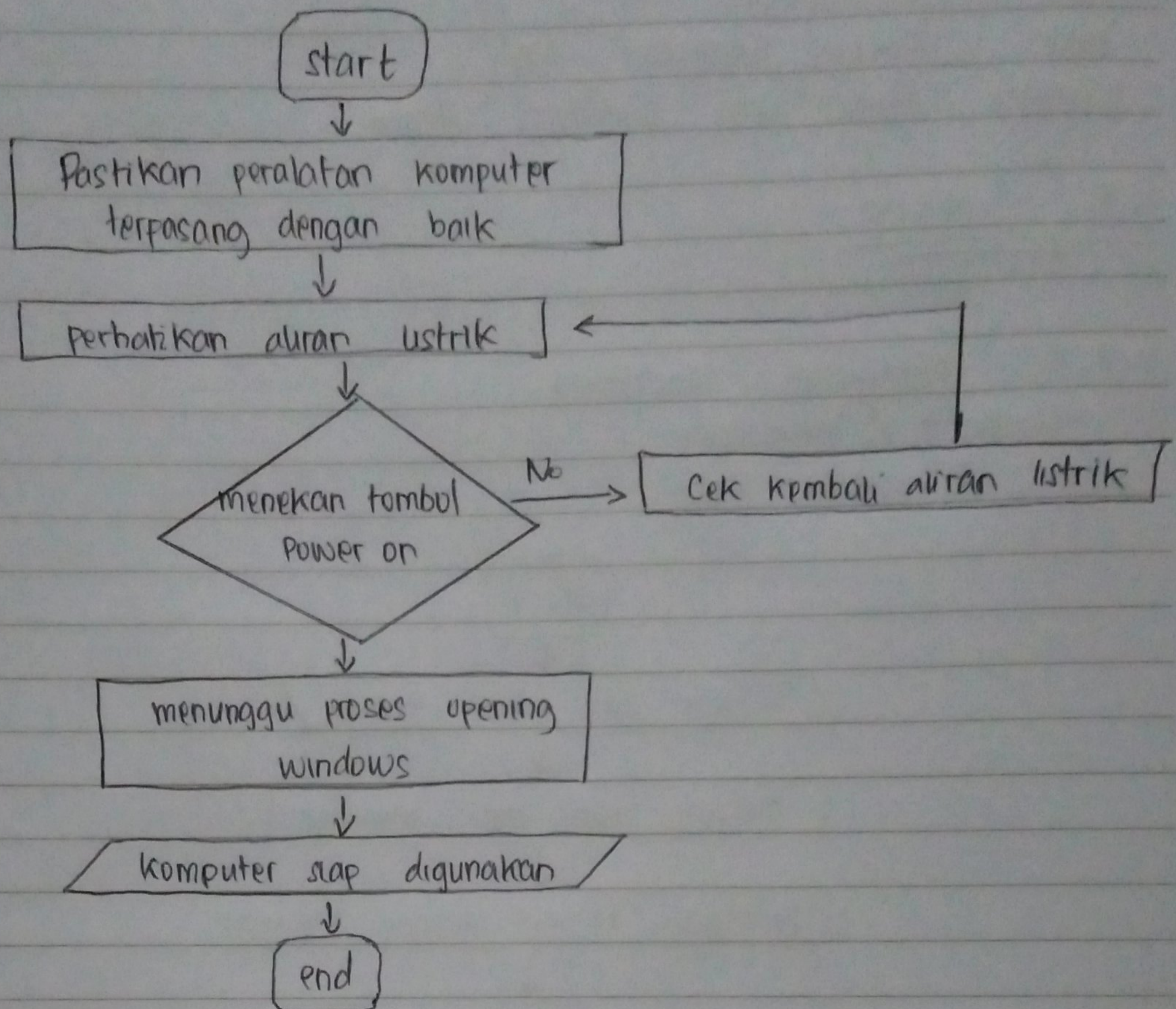
Nama : Widya Netriaal
NIM : 2201082019
Kelas : Teknik Komputer 1B
Matakul : Pemrograman Berbasis Objek.

1.7 Latihan

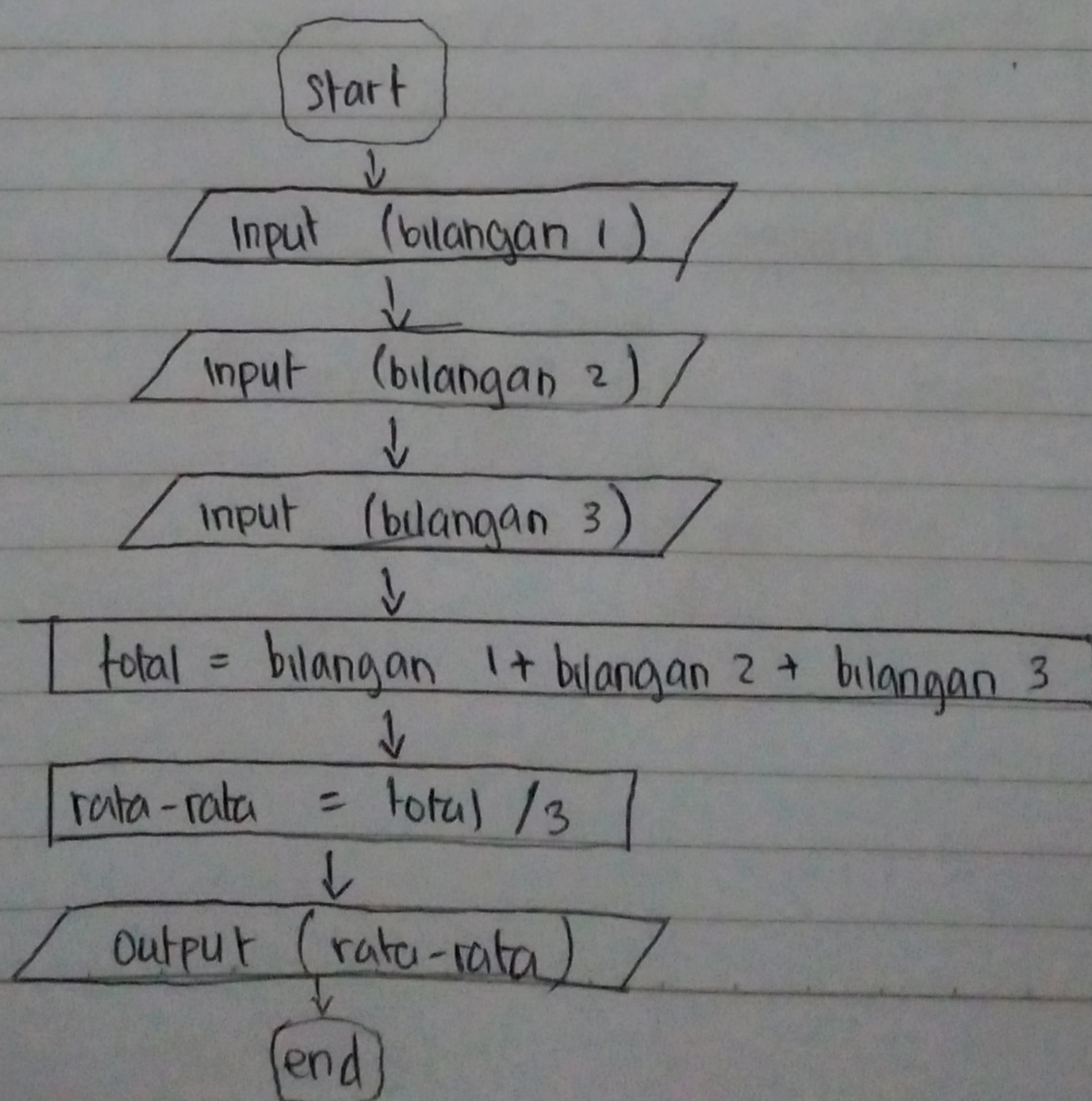
1.7.1 Menyusun algoritma
flowchart / Pseudocode
1. Memasak Roti



2. Menggunakan komputer di Laboratorium



3. Menghitung rata-rata dari 3 bilangan



1. 1980_{10} ke sistem bilangan biner, Heksadesimal dan oktal

Biner	2	1980	0
	2	990	0
	2	495	1
	2	247	1
	2	123	1
	2	61	1
	2	30	0
	2	15	1
	2	7	1
	2	3	1
	2	1	1
		0	

$$\begin{array}{r|l} \text{oktal} = 8 & 1980 \\ 8 & 247 \\ 8 & 30 \\ 8 & 3 \\ & 0 \end{array}$$

$$\Rightarrow 3674_8$$
$$\Rightarrow 111011100$$

Hecksadesimal = 16 | 1980 12
16 | 123 11
16 | 7 7
0

$$\Rightarrow 7BC_{16}$$

2. 1001001101_2 ke sistem bilangan Desimal, heksadesimal dan oktal

Decimal = $0 \times 2 + 1 = 1$

$$1 \times 2 + 0 = 2$$
$$2 \times 2 + 0 = 4$$
$$4x^2 + 1 = 9$$
$$9 \times 2 + 0 = 18$$
$$10 \times 2 + 0 = 36$$
$$36 \times 2 + 1 = 73$$
$$73 \times 2 + 1 = 143$$
$$143 \times 2 + 0 = 294$$
$$294 \times 2 + 1 = 589$$
$$= \Delta 589_{10}$$

Heksadesimal = 10 1000 1101

2 4 13

2 y d

$$= D_{24D_{16}}$$

Oktaal = 1 | 001 | 001 | 101

1 1 1 5

$$\Rightarrow 1115_8$$

3. 76_8 ke sistem bilangan biner, Heksadesimal dan desimal

$$\begin{array}{r} \text{Biner} = \quad 7 \quad 6 \\ \quad \quad \quad 111 \mid 110 \\ \Rightarrow 11110_2 \end{array}$$

$$\begin{array}{r} \text{Desimal} = \quad 11 \mid 1110 \\ \quad \quad \quad 3 \quad 4 \\ \Rightarrow 3E \end{array}$$

$$\begin{array}{r} \text{Heksadesimal} = \quad 7 \quad 6 \\ \quad \quad \quad 6 \times 8^0 = 6 \\ \quad \quad \quad 7 \times 8^1 = \frac{56}{62} + \\ \Rightarrow 62_{10} \end{array}$$

4. $43F_{16}$ ke sistem bilangan biner, desimal dan oktal

$$\begin{array}{r} \text{Biner} = \quad 4 \mid 3 \mid F \\ \quad \quad \quad 100 \mid 0011 \mid 111 \\ \Rightarrow 100001111_2 \end{array}$$

$$\begin{array}{r} \text{Oktal} = \quad 10 \mid 000 \mid 111 \mid 111 \\ \quad \quad \quad 2 \quad 0 \quad 7 \quad 7 \\ \Rightarrow 2077_8 \end{array}$$

$$\begin{array}{r} \text{Desimal} = \quad 43F \\ \quad \quad \quad F \times 16^0 = 15 \\ \quad \quad \quad 3 \times 16^1 = 48 \\ \quad \quad \quad 4 \times 16^2 = \frac{1024}{1087} + \\ \Rightarrow 1087_{10} \end{array}$$