

28-08-2024

# PF LAB 02

Date:

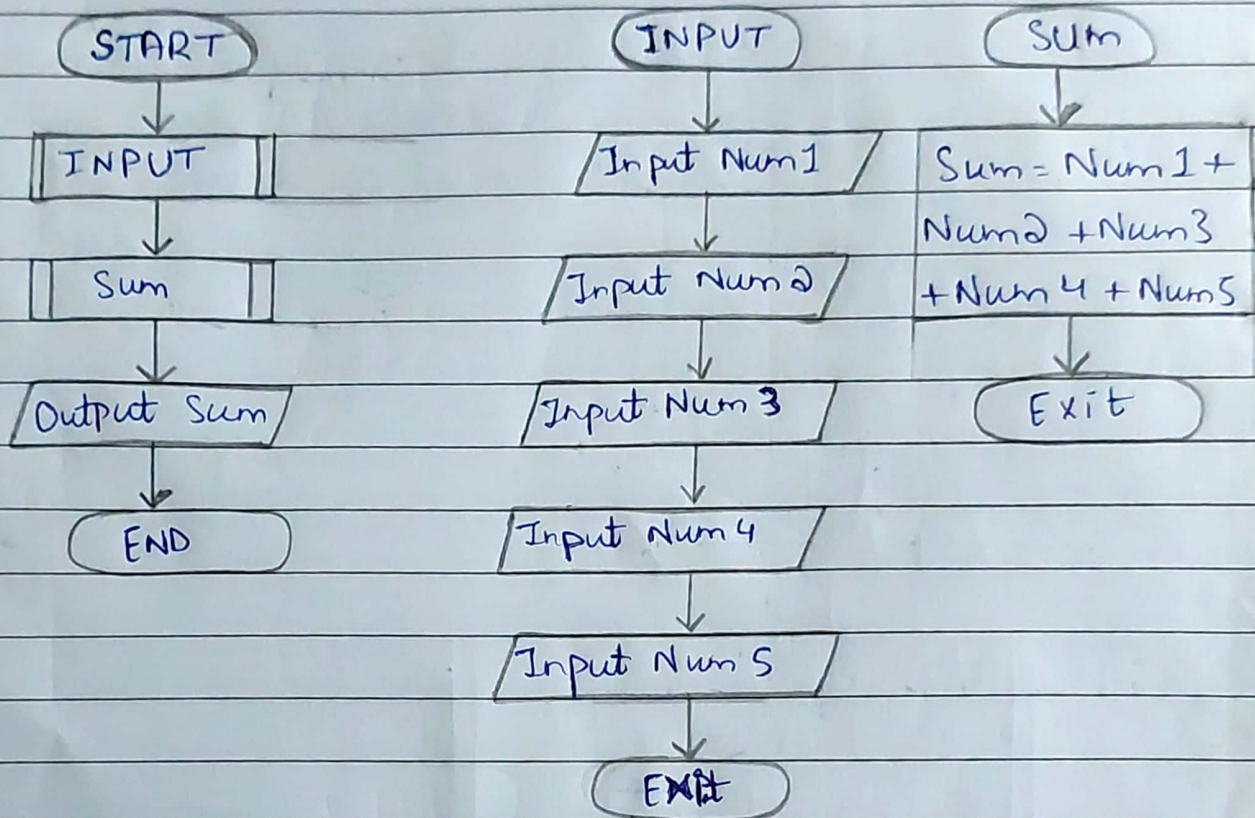
M	T	W	T	F	S	S
---	---	---	---	---	---	---

Talha Ali Khan

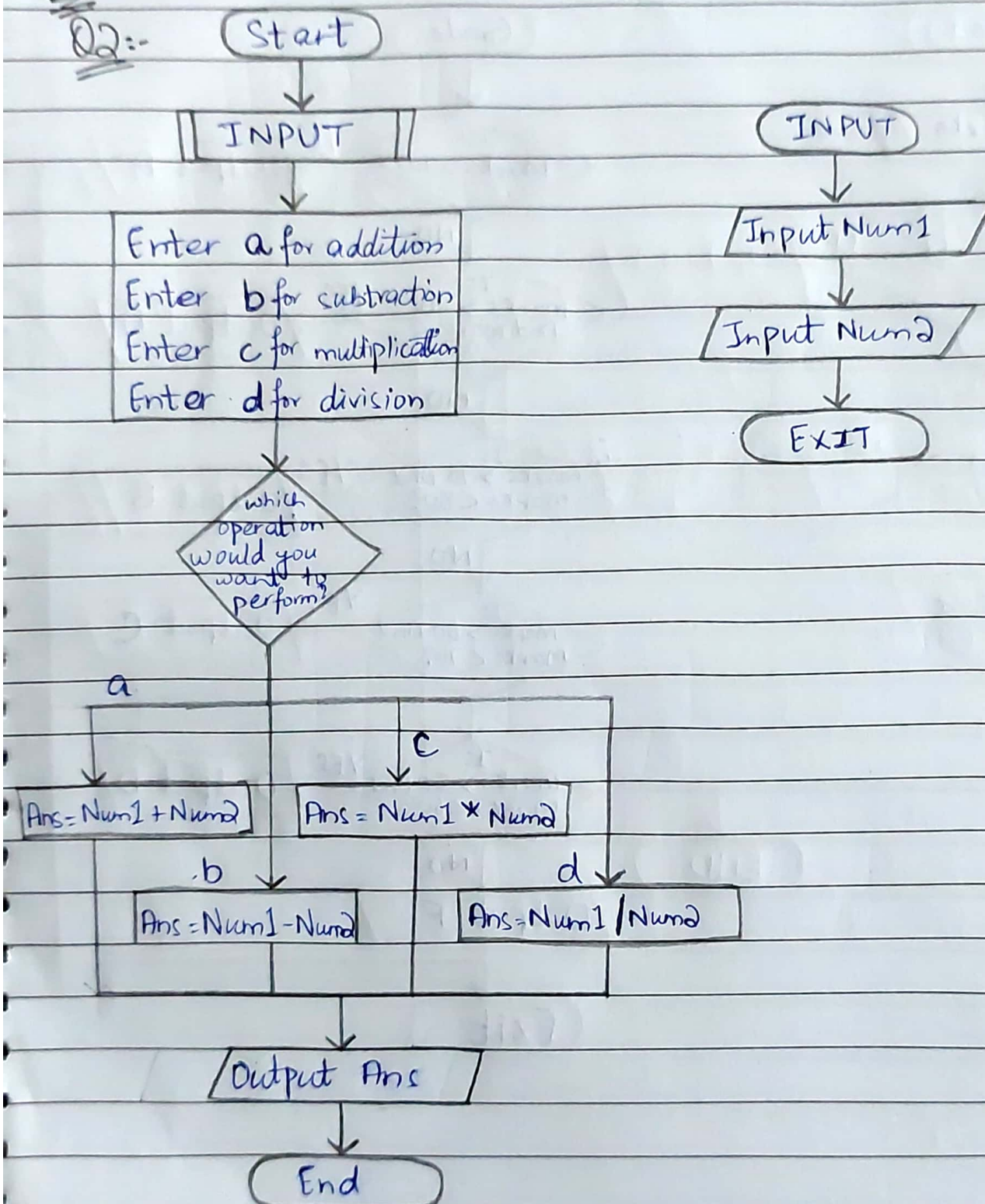
24K-3040

## "FLOWCHART PROBLEMS"

Q1:-



Q2:-

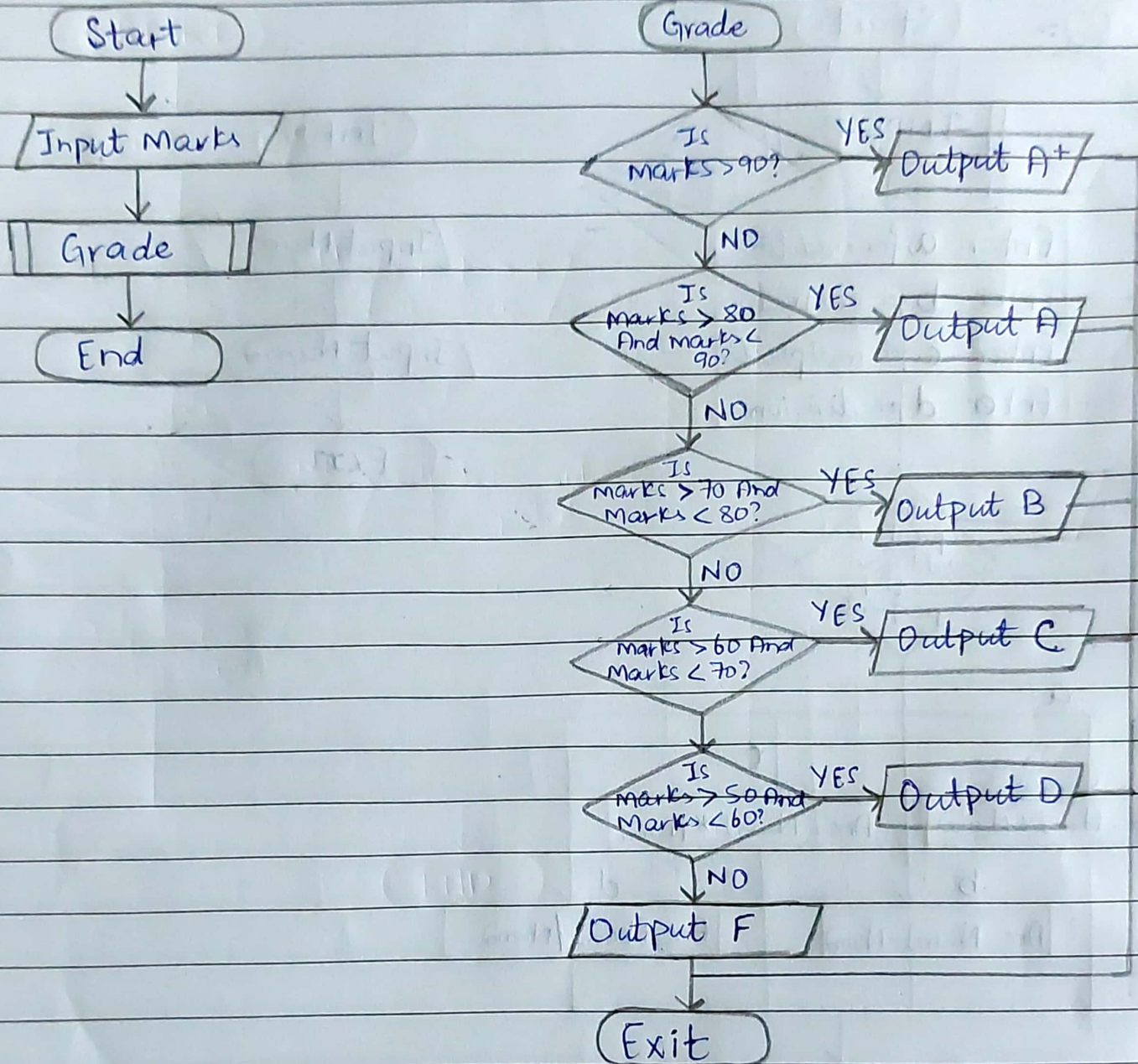




Date: \_\_\_\_\_

M	T	W	T	F	S	S
---	---	---	---	---	---	---

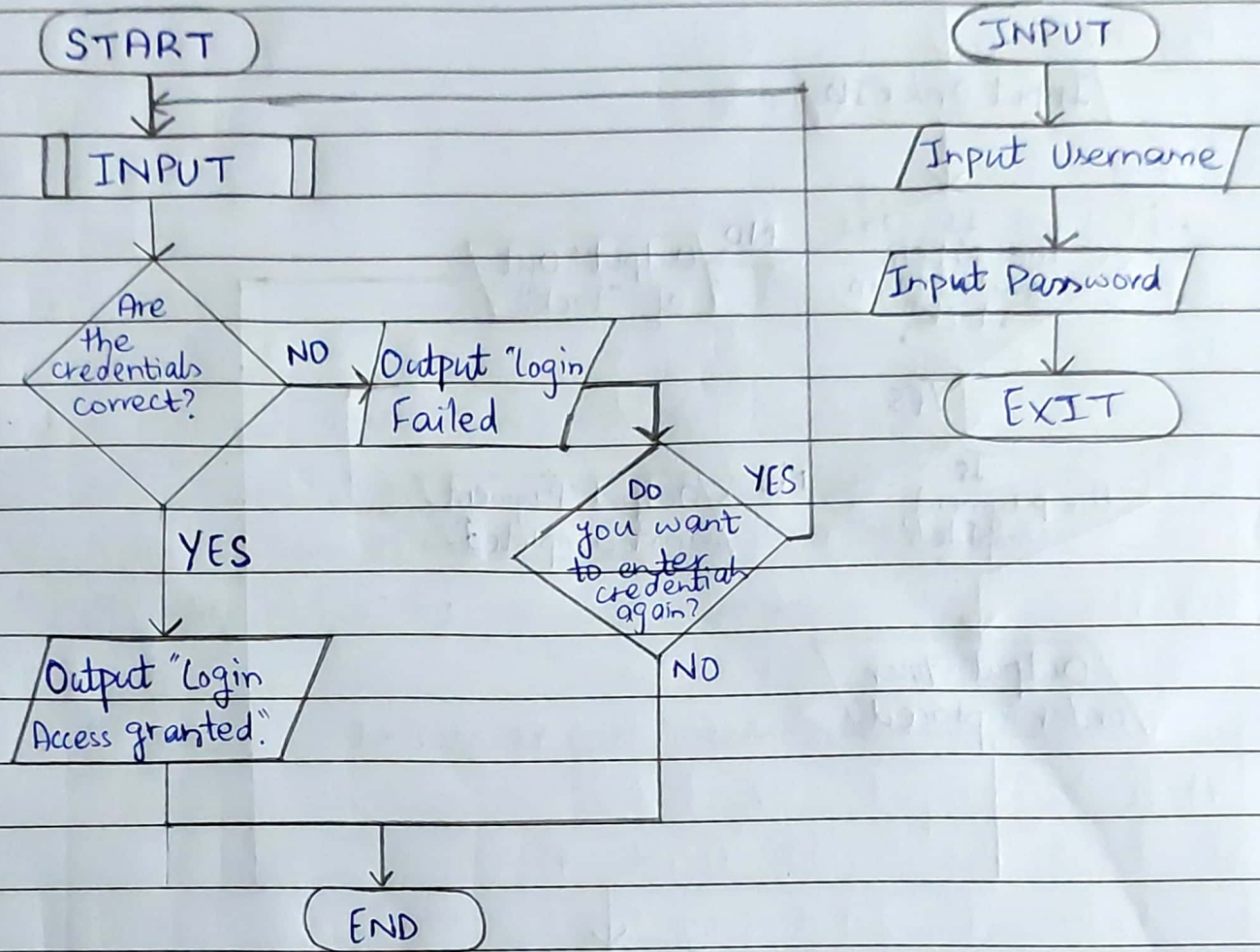
Q3:-



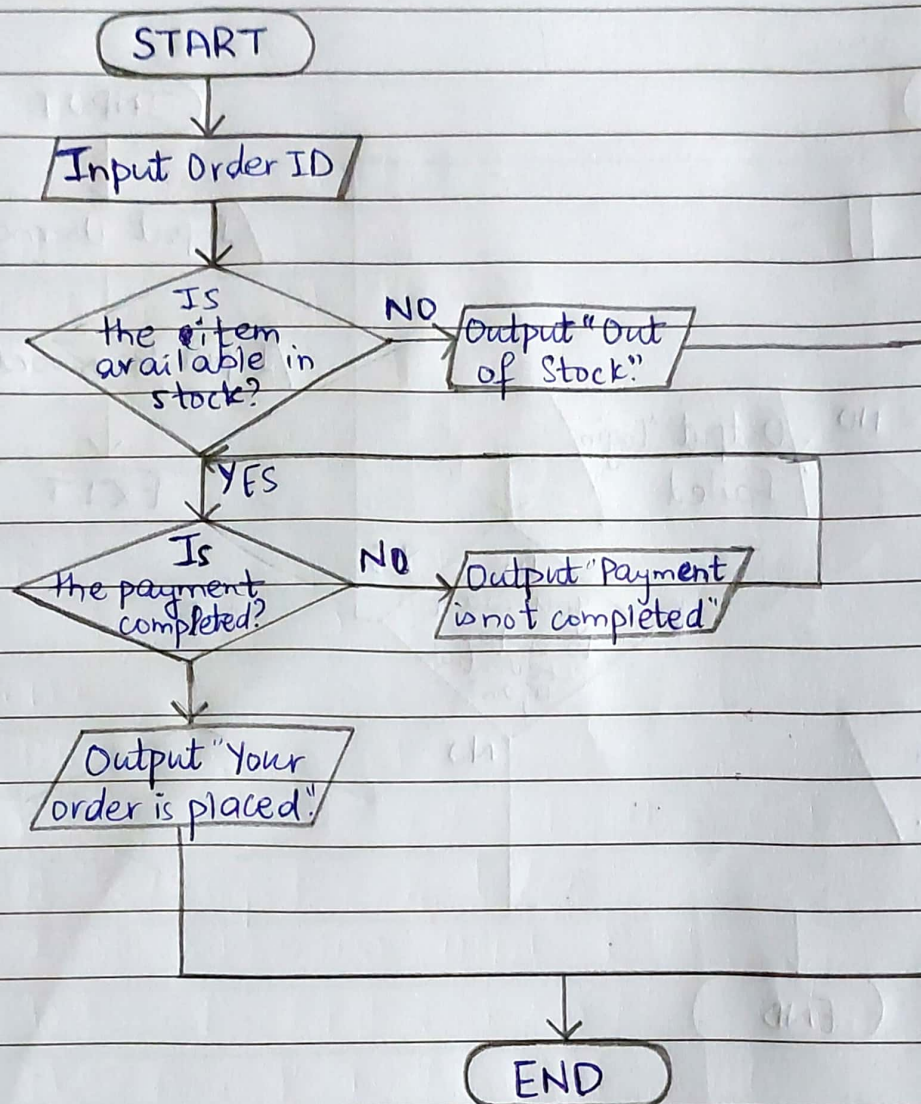
Date: \_\_\_\_\_

M	T	W	T	F	S	S
---	---	---	---	---	---	---

Q4:-





Q5:-

## "PSEUDOCODE PROBLEMS."

Q1:-

```
01  START
02  INPUT Num1
03  INPUT Num2
04  INPUT Num3
05  IF Num1 > Num2 AND Num1 > Num3 THEN
06      PRINT "Num1, "is the largest number".
07  ELSEIF Num2 > Num1 AND Num2 > Num3 THEN
08      PRINT Num2, "is the largest number".
09  ELSE
10      PRINT Num3, "is the largest number".
11  END
```

Q2:-

```
01  START
02  INPUT Num_of_Hours_Parked
03  SET cost = 0
04  IF Num_of_Hours_Parked  $\leq$  1 THEN
05      SET cost = 5
06  ELSE
07      cost = 5 + [(Num_of_Hours_Parked - 1) * 3]
08  PRINT "Your total parking fees is," cost
09  END
```



Q3:-

```
01  START
02  SET Total_Cost = 0
03  REPEAT
04      INPUT Item_Cost
05      SET Total_Cost = Total_Cost + Item_Cost
06  UNTIL all inputs are taken
07  IF Total_Cost > 100 THEN
08      Discount = Total_Cost * 0.1
09      New_Amount = Total_Cost - Discount
10      Print New_Amount
11  ELSE
12      PRINT Total_Cost
13  END
```

Q4:-

```

01 START
02 INPUT Number
03 IF Number MOD 2 = 0 THEN
04     PRINT "The number is even."
05 ELSE
06     PRINT "The number is odd."
07 END
    
```

## 'ALGORITHM PROBLEMS'

Q1:-

```

01 Ask the user to enter the the number of days they attended.
   Set total_classes 0
02 Ask the user to enter the number of days classes were held.
03 Set Attendance to  $\frac{\text{Attended Class}}{\text{Total\_Class}} \times 100$ 
04 Is Attendance < 75?
   Display
05 Display "Warning! Student's attendance is below 75."
06 Otherwise display "Attendance of student is sufficient."
    
```



Q2:-

- 01 Ask the user to enter the number\_of\_hours worked.
- 02 Ask the user to enter the pay\_rate
- 03 Set gross\_pay to (number\_of\_hours\_worked  $\times$  pay\_rate).
- 04 Display gross\_pay

Q3:-

- 01 Ask the user to enter Num1
- 02 Ask the user to enter Num2
- 03 Ask the user to enter operation (out from addition, subtraction, multiplication, or division or remainder).
- 04 IF operation is addition THEN  
Set answer = ~~Num1~~ Num1 + Num2
- 05 IF operation is subtraction THEN  
Set answer = Num1 - Num2 ~~THEN~~
- 06 IF operation is multiplication THEN  
Set answer = Num1  $\times$  Num2
- 07 IF operation is ~~or~~ division THEN  
Set answer = Num1 / Num2
- 08 IF operation is remainder THEN  
Set answer = Num1 % Num2
- 09 ELSE ask the user to enter operation again
- 10 Display answer to the user.

Q4:-

- 01 Ask the user to enter total\_bill
- 02 Ask the user to give tip
- 03 IF yes THEN  $\text{final\_bill} = (\text{total\_bill} + (\text{total\_bill} \times 0.15))$
- 04 IF no THEN  $\text{final\_bill} = \text{total\_bill}$
- 05 Display final\_bill

Q5:-

- 01 Ask the user to enter Marks
- 02 IF Marks greater than 80, display A grade
- 03 IF Marks greater than 60, display B grade
- 04 IF Marks greater than 55, display C grade