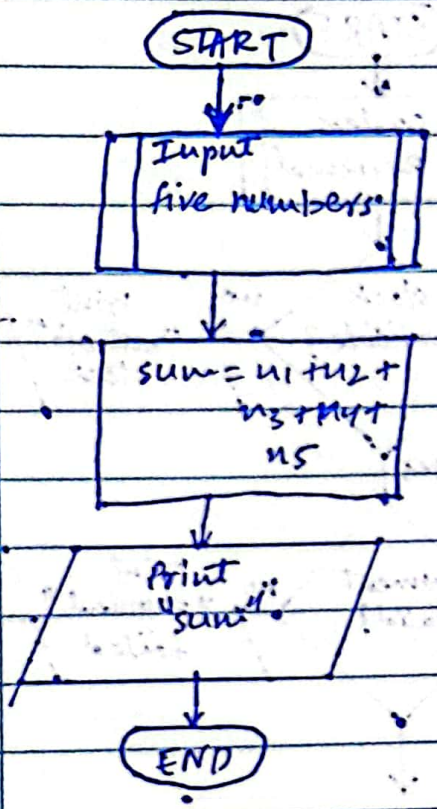
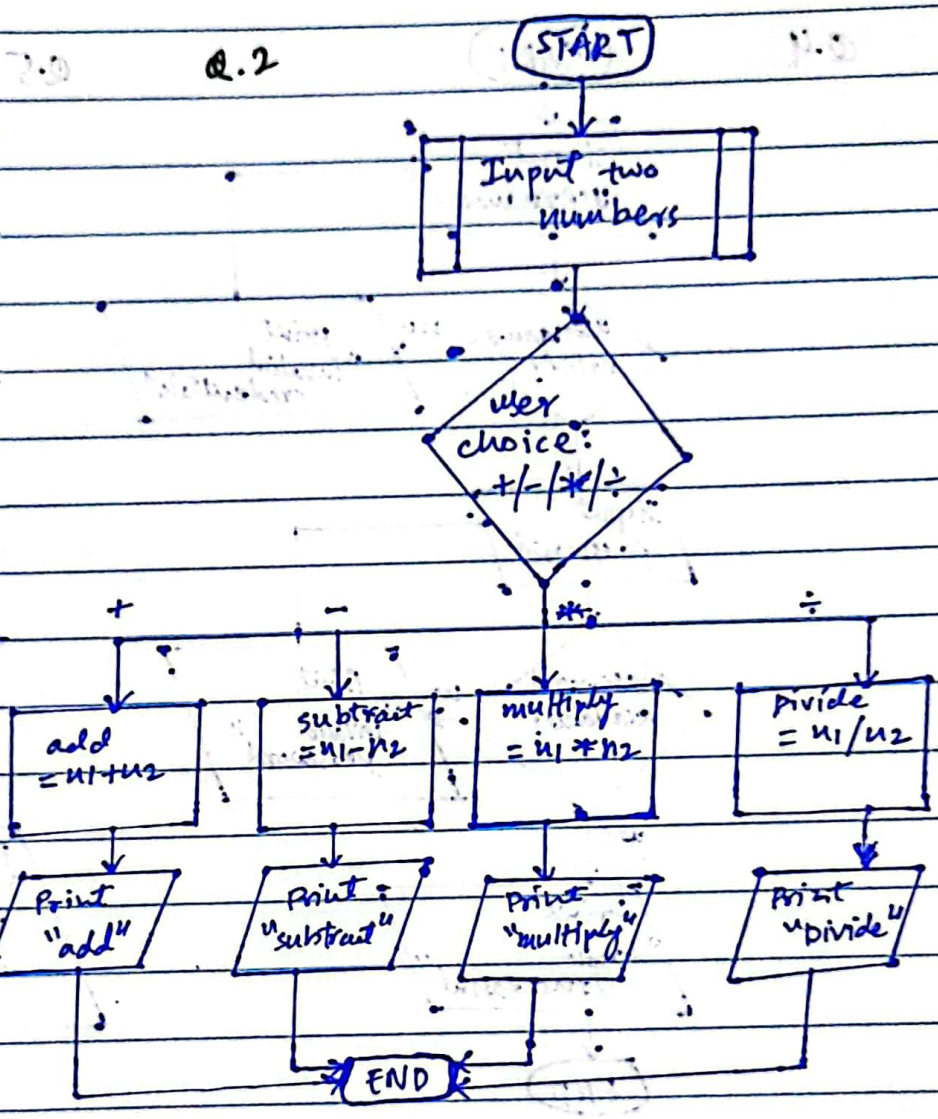
Date:

Flowcharts

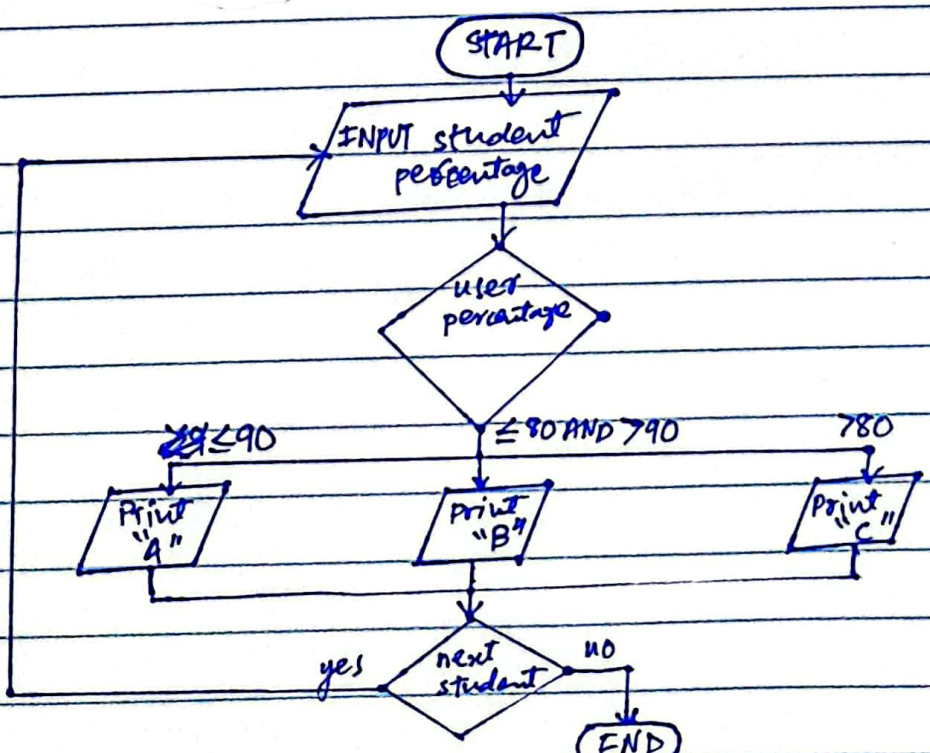
Q.1



Q.2

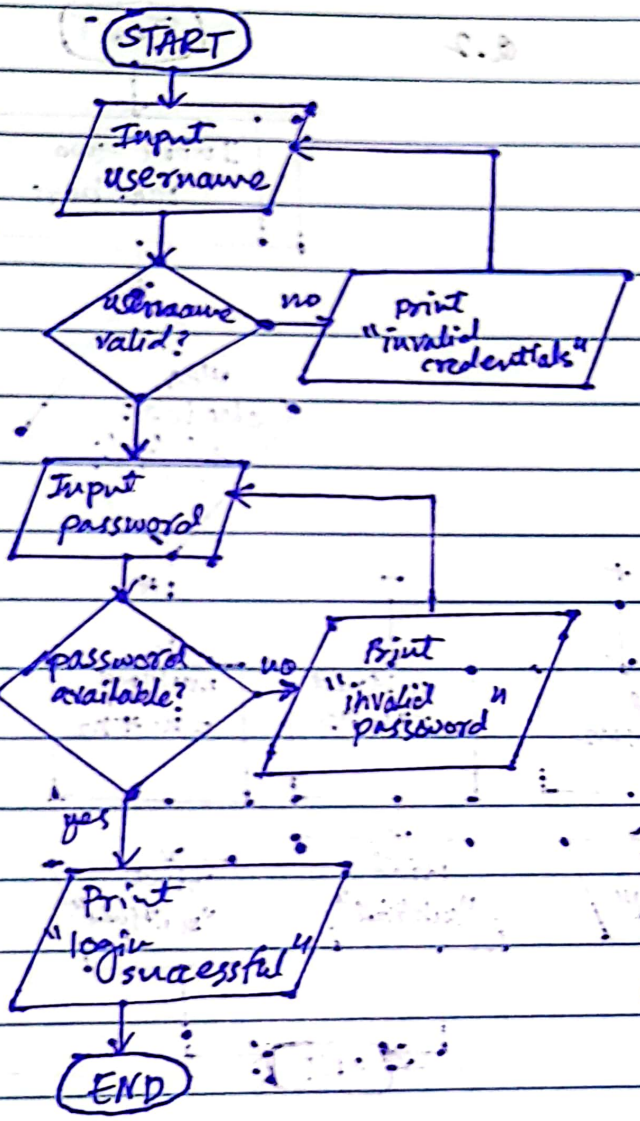


Q.3

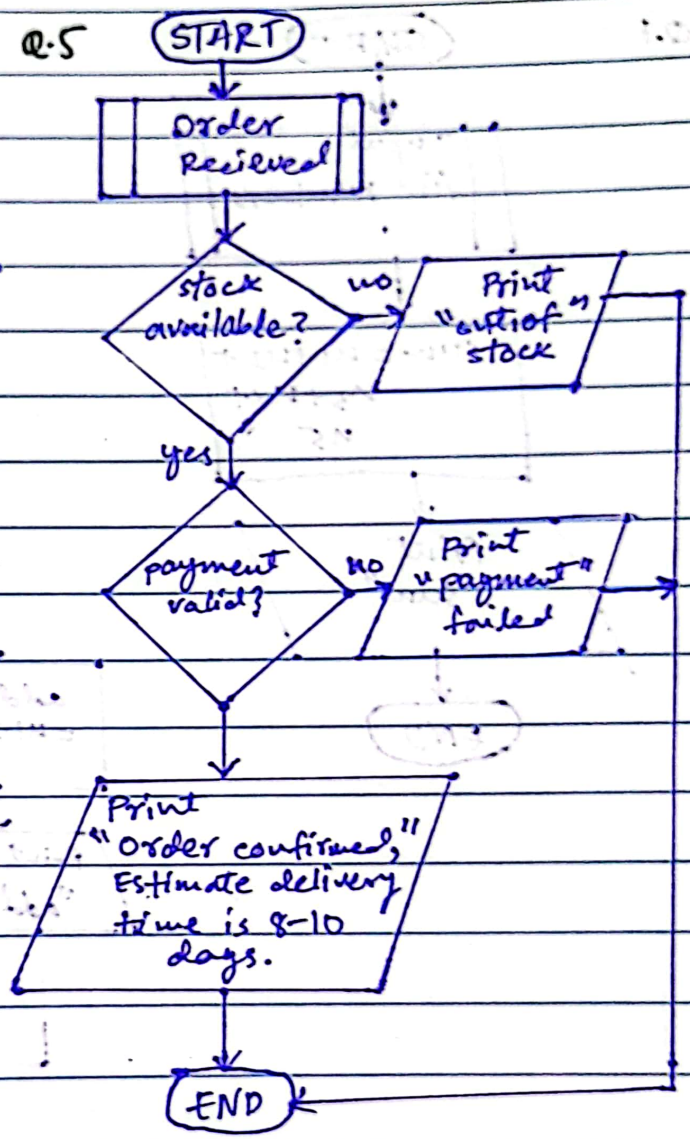


Date:

Q.4


START
Input username
username valid?
no
Print "invalid credentials"
Input password
password available?
no
Print "invalid password"
yes
Print "login successful"
END

Q.5


START
Order Recieved
stock available?
no
Print "out of stock"
yes
payment valid?
no
Print "payment failed"
Print "order confirmed," Estimate delivery time is 8-10 days.
END

Date:

Pseudocode

Q.1

1. START
2. INPUT n1
3. INPUT n2
4. INPUT n3
5. IF n1 > n2 AND n1 > n3 THEN
6. DISPLAY "n1 is greatest"
7. ELSEIF n2 > n1 AND n2 > n3
8. DISPLAY "n2 is greatest"
9. ELSE
10. DISPLAY "n3 is greatest"
11. END

Q.2

1. START
2. INPUT Parked_hours
3. SET Total_fee = 0
4. IF Parked_hours ≤ 1 THEN
5. SET Total_fee = 5
6. DISPLAY "Total Parking fees is Total_fee"
7. ELSE
8. SET Total_fee = 5 + (Parked_hours - 1)*3
9. DISPLAY "Total Parking fees is Total_fee"
10. END

Date:

Q.3

```
1.  START
2.  SET TotalCost = 0
3.  SET discount = 0
4.  SET discountCost = 0
5.  INPUT Items
6.  REPEAT
7.      INPUT Item_Name
8.      INPUT Price
9.      Totalcost += Price
10.     Items -= 1
11. UNTIL Items > 0
12. IF TotalCost > 100 THEN
13.     SET discount = 0.25
14.     SET discountCost = TotalCost * (1 - discount)
15.     DISPLAY "You need to pay discountCost"
16.     DISPLAY "Discount applied is," discount * 100 "%"
17. ELSE
18.     DISPLAY "You need to pay TotalCost"
19. END
```

Q.4

```
1. START
2. INPUT number
3. IF number % 2 == 0 THEN
4.     PRINT "Number is even"
5. ELSE
6.     PRINT "Number is odd"
7. END
```

Date:

Algorithms

Q.1

1. Ask the user for attendedClasses, and totalClasses.
2. Calculate attendencePercentage using formula:
   - attendancePercent = (attendedClasses / totalClasses) * 100
3. Check if 'attendancePercent' < 75,
   - Display Warning.
4. Display attendancePercent for the user.

Q.2

1. Ask the user to enter HoursWorked.
2. Ask the use. to enter. PayRate.
3. Set GrossPay to (HoursWorked x PayRate)
4. Display GrossPay for the user.

Q.3

1. Ask the user to enter first_number (num1).
2. Ask the user to enter operator (+, -, *, /, %).
3. Ask the user to enter second_number (num2).
4. Check if user selected '+' operator so:
   - → result = num1 + num2.
5. Check if user selected '-' operator so:
   - → result = num1 - num2.
6. Check if user selected '*' operator so:
   - → result = num1 * num2
7. Check if user selected '/' operator so:
   - → result = num1 / num2.
8. Check if user selected '%.' operator so:
   - → result = num1 %. num2.
9. Display result for the user.

Date:

Q.4

1. Ask the user to enter amount of bill before tip (Total)
2. Ask the user whether to add the tip or not.
3. Check if user selects 'Yes' so:
   - ~~Display~~ set final_amount to Total*(1+0.15)
   - Display final_amount for user.
4. Check if user selects 'No' so:
   - Display Total for user.

Q.5

1. Ask the user to enter student_percentage.
2. Check if the ~~the~~ student_percentage is between 85 and 100 so:
   - Display "Grade A" for the user.
3. Check if the student_percentage is between 70 and 84 so:
   - Display Grade B for user.
4. Check if student_percentage is less than 70 so:
   - Display Grade C for the user.