Practical No. 1

**Input – Process – Output**

*Write Algorithms & Draw Flow charts of the Following programs:*

1. Addition of 2 numbers.
2. Subtraction of 2 numbers.
3. Multiplication of 2 numbers.
4. Division of 2 numbers.
5. Addition of 3 numbers & display the average of 3 numbers.
6. Area of Circle.
7. Area of Triangle.
8. Area of Parallelogram.
9. Input 5 subject marks & calculate the Total and Percentage of student. [Each subject of 100 Marks].
10. Input the quantity and rate of the product & display the amount paid.
11. Input rate and hour to display payment of the employee.

Practical No. 2

**Input – Decision – Process – Output**

*Write Algorithms & Draw Flow charts of the Following programs:*

1. Calculate payment with overtime for per hours. Display how much amount is paid.
2. Comparison between 2 numbers then display which is greater number.
3. Comparison of 3 numbers then display the greatest number of them.
4. Input 5 subject marks & calculate the Total and Percentage of student. [Each subject of 100 Marks]. Display result of student as Pass or Fail.
5. Display the grade of students.
6. Input the number and check if it is Even or Odd number.

Practical No. 3

**Input – Decision – Process – Output**

*Write Algorithms & Draw Flow charts of the Following programs:*

1. Input purchase amount if purchase amount is greater than or exceeds 10,000/- , then 10% discount allowed else 5% discount allowed to the customer. Calculate & display the discount and net amount for customer.
2. Input the number and check whether it is divisible by 3 or not.
3. Input the number and check whether it is divisible by 2 & 3.
4. Input a year and check whether it is Leap year or not a Leap year.
5. Input Salesman name & sales amount and check if the sales amount is greater

than or exceeds 50,000/- then commission of 5% is given to the salesman. Display Name, Sales amount & commission of the salesman.

1. Input the number & check whether it is divisible by 5 or 7.

Practical No. 4

**Loops : While, Do while and For Loops**

*Write Algorithms & Draw Flow charts of the Following programs:*

1. Display 1 to 10 numbers using for loop.
2. Display sum of 1 to 10 numbers.
3. Display even numbers from 1 to 50.
4. Display odd numbers from 1 to 50
5. Display 10 to 1 numbers.
6. Display even numbers from 50 to 1.
7. Display odd numbers from 50 to 1.
8. Display the table of 5.
9. Input the purchase amount if purchase amount is greater than or exceeds 10,000/- , then 10% discount allowed else 5% discount allowed to the customer. Calculate & display the discount and net amount for 10 customers.
10. Input the Salesman name & sales amount and check if the sales amount is

greater than or exceeds 50,000/- then commission of 5% is given to the salesman. Display Name, Sales amount & commission of 5 salesmans.

Practical No. 5

*Write C – programs for the Following:*

1. Addition of two numbers.
2. Subtraction of 2 numbers.
3. Multiplication of two numbers.
4. Division of two numbers.
5. Average of 3 numbers.
6. Area of triangle.
7. Area of circle.
8. Input the rate & hours & calculate payment as clock hour basis.
9. Input 5 subject marks calculate total & percentage. Print total and percentage and check the student is pass or fail.
10. Input the numbers & check if it is divisible by 3 or not.
11. Input the numbers & check if it is divisible by 5 or 7.
12. Input a character & check if it is vowel or constraint.

Practical No. 6

*Write C – programs for the Following:*

1. Write a program to input the Telephone number and number of calls made. Calculate and display the bill amount which includes a fixed rent of 250, the first 60 calls are free and excess calls are charged @ 80 paise each.
2. In a factory weekly wages of workers is calculated as follows: -

First 35 hours is considered as regular hours. Hours exceeding 35 is considered as over time. Write a program to input workers name (wn), hours worked (hr) and rate per hour (r) and display workers name, regular wage, overtime wage and total wage, Where overtime wages is paid at 2 times the rate.

1. Write a program to accept employee no. (eno), basic salary (bs) from the keyboard. Calculate and display dearness allowance (da) as 120% of basic salary, house rent allowance (hra) as 20% of basic salary or Rs.3,000 whichever is less, special allowance (sa) as 15% of basic salary whenever basic salary in over Rs. 3,500 otherwise no special allowance is to be given and gross salary (gs) which is (gs=ba+da+hra+sa).
2. Write a program to input meter number, current reading, previous reading and consumer type (residential (r) or commercial (c)). Calculate billing amount as per criteria given below:

|  |  |  |  |
| --- | --- | --- | --- |
| ***Residential*** |  | ***Commercial*** |  |
| Units | Rate | Units | Rate |
| 0-100 | Rs. 3.5 per unit | 0-500 | Rs. 7.00 per unit |
| Above 100 | Rs. 5.5 per unit | Above 500 | Rs. 11.50 per unit |

Display the bill showing meter number, current reading, previous reading, units consumed, type and billing amount.

1. Write a program to accept sales from the keyboard and calculate and display sales tax as per the following :

|  |  |
| --- | --- |
| ***Sales*** | ***Sales Tax*** |
| Upto Rs. 5,000 | 5% of sales |
| Between Rs. 5,000 and upto Rs. 9,000 | 10% of sales |
| Over Rs. 9,000 | 12% of sales |

***Practical No - 7***

*Write C – programs for the Following:*

1. Input the Purchase amount & code. If purchase amount exceed 10,000 then discount of 15% is given else 8% is given. Calculate discount & net amount. Print code, purchase amount, discount & net amount.
2. Input numbers of years and rate of interest & principle amount calculate simple interest & print it.
3. Input salesmen name sales amount if sales amount exceeds 20,000 then commission of 5% is given if less than 10,000 then 2% commission is given & if it is in between 10,000 and 20,000 then commission of 3% is given. Display SN, SA, Comm of salesman.
4. Display 1 to 10 numbers.
5. Display sum 1 to 10 numbers.
6. Display even numbers from 1 to 10.
7. Display square of all 1 to 10 natural numbers.
8. Write the program for the following series

1/2 + 2/3 + 3/4 +.....+ 9/10

1. Write the program for the following series

1/12 + 1/22  + 1/32 + ……….+ /202

1. Write the program for the following series

2 + 4 + 6 + …. + 10

1. Write the program for the following series

2/5 + 4/8 + 6/11 +…… + 302/305

1. Write a program to input name of employee (ename) and his basic salary (bs).

Calculate DA at 80% of basic salary, HRA at 15% of basic salary, and 9% of CCA. Calculate Gross salary where [gross salary = basic salary + HRA + DA + CCA] Calculate provident fund (PF) 1% on gross salary and net amount.

Display **ename, bs, gross salary, DA, HRA, CCA, PF and net amount** of employee.

1. Display the table of 5 in the format of

**5 \* 1 = 5**

**5 \* 2 = 10**

**5 \* 3 = 15**

**: :**

**: :**

**5 \* 10 = 50**