Practice Programs (Module 2)

1. WAP to demonstrate different data types and print them.
2. WAP to initialize the values 37, 106, 78, 64, 210 and print their corresponding ASCII characters.
3. WAP to display the ASCII equivalent of *, A, 9, ^.
4. WAP to demonstrate addition, subtraction, multiplication, Division, Modulus for any two user input values. Write the algorithm and flowchart.
5. WAP to demonstrate bitwise operators for a =5 and b=9.
6. WAP to initialize 2 numbers and find the largest number using conditional operator. Write the algorithm and flowchart.
7. WAP to compute the perimeter and area of a circle with a given radius. Write the algorithm and flowchart.
8. WAP to compute the perimeter and area of a rectangle with user entered length and width. (restrict floating point number with two decimal places)
9. WAP to evaluate the net salary of an employee given the following constraints:
   Basic salary: Rs. 12000
   DA: 12% of Basic Salary
   HRA: Rs. 150
   TA: Rs. 120
   Others: Rs. 450
   Tax cuts:
   a) PF: 14% of Basic salary and
   b) IT: 15% of Basic salary
   Net Salary = Basic Salary + DA + HRA + TA + Others – (PF + IT)
10. **WAP to separate the digit of a three-digit number and display the three digits separately. Write the algorithm and flowchart.**
11. WAP to accept one int data type and one float type data. Multiply the two numbers and display the result.
12. WAP to accept 3 numbers from user and display the greatest of the three using conditional operator. Write the algorithm and flowchart.
13. Print out the equivalent number of feet (floating, 1 decimal) and inches (floating, 1 decimal), with feet and the inches given to an accuracy of one decimal place.
14. WAP to verify the given formula (assume the initial values of the given variables):
    P*(1+(r/100)/n)+p
15. Convert a given temperature in Celsius to Fahrenheit. Write the algorithm and flowchart.
16. WAP to accept three numbers and find their average. Write the algorithm and flowchart.
17. WAP to accept a number from user and find the remainder after dividing it by 2 and 5. Write the algorithm and flowchart.
18. Find the output of the following codes:

```c
#include<stdio.h>
int main()
{
  int a,b,c;
  a=2; b=5; c=10;
  printf("Result = %d\n",(a+b*-c));
  printf("Result = %d\n",(-c/b*c-a));
  printf("Result = %d\n",(-a+ ++b %a));
  printf("b = %d\n",b);
  return 0;
}
```

```c
#include<stdio.h>
int main()
{
 int x, y;
  x = 5;
  y = x++ / 2;
  printf("y = %d\n", y);
  printf("x = %d", x);
  return 0;
}
```

```c
#include<stdio.h>
int main()
{
  int a=10,b,c;
  c=b=a;
  b-=a--;
  c-=--a;
  a-=--a - a--;
  printf("a = %d\n",a);
  printf("b = %d\n",b);
  printf("c = %d\n",c);
  return 0;
}
```

```c
#include<stdio.h>
int main()
{
 int x, y;
  x = 5;
  y = x++ / 2;
  printf("y = %d\n", y);
  printf("x = %d", x);
  return 0;
}
```

```c
#include<stdio.h>
int main()
{
  int a=4,b,c;
  b = --a;
  c = a--;
  printf("%d %d %d",a,b,c);
  return 0;
}
```

```c
#include<stdio.h>
int main()
{
  int a=2,b=1,c=0;
  c = a+++b;
  printf("%d %d %d",a,b,c);
  return 0;
}
```

```c
#include<stdio.h>
int main()
{
  printf("%d ", + +9);
  printf("%d ", + -9);
  printf("%d ", - +9);
  printf("%d ", - -9);
  return 0;
}
```

```c
#include<stdio.h>
int main()
{
  int x;
  x = 5;
  printf("%d ", x);
  printf("%d ", x--);
  printf("%d", x);
  return 0;
}
```

```c
#include <stdio.h>

int main()
{
    int a=1,b=2,c=3,d=4.75,x;
    x = ++a+b++*++c%d++;
    printf("%d\n",a);
    printf("%d\n",b);
    printf("%d\n",c);
    printf("%d\n",d);
    printf("%d\n",x);

    return 0;
}
```

```c
#include <stdio.h>

int main()
{
    int x=1;
    printf("%d %d %d\n",x,(x=x+2),(x<<2));
    x<<2;
    printf("%d %d %d\n",++x,x++,++x);
    return 0;
}
```