PRACTICAL

1 - Write a C program to display "hello computer" on the screen.

```
#include <stdio.h>
#include <conio.h>
void main()
{
   clrscr();

   printf("Hello Computer");

   getch();
}
```

Output:

Hello Computer

2. write a c program to print roll no, name, address.

```
#include <stdio.h>
#include <conio.h>

void main()
{
   clrscr();

   printf("Rollno : 21 \n");

   printf("Name : Ami Patel \n");

   printf("Address : Gandhinagar");

   getch();
}
```

Output:

```
Rollno : 21
Name : Ami Patel
Address : Gandhinagar
```

3. write a C program to find the area of circle using the formula Area = PI * r * r.

```
#include <stdio.h>
#include <conio.h>
void main()
{
   float pi = 3.14;
   float r, area;

   clrscr();

   printf("\n");
   printf("Enter the value of r : ");
   scanf("%f", &r);

   area = pi * r * r;

   printf("Area : %f", area);

   getch();
}
```

Output

```
Enter the value of r : 5
Area : 78.500000
```

4. Write a C program to find the area of rectangle, cube and triangle.(Formula are : Rectangle = l * b * h, triangle = (l * b) * 0.5, cube = L * L * L.

```
#include <stdio.h>
#include <conio.h>

void main()
{
   float t;
   int l, b, h, r, c;

   clrscr();

   printf(" Enter the Value of l : ");
   scanf("%d", &l);

   printf("\n Enter the of b : ");
   scanf("%d", &b);

   printf("\n Enter the value of h : ");
   scanf("%d", &h);

   r = l * b * h;
   c = l * l * l;
   t = (l * b) * 0.5;

   printf("\n Rectangle :%d ", r);
   printf("\n Cube : %d", c);
   printf("\n Triangle : %f \n", t);

   getch();
}
```

Output

```
Enter the Value of l : 5

Enter the of b : 5

Enter the value of h : 5

Rectangle :125
Cube : 125
Triangle : 12.500000
```

5.Write a C program to find the area and volume of sphere. Formulas are Area = 4* PI *R *R Volume = (4/3) * PI *R * R *R.

```
#include <stdio.h>
#include <conio.h>

void main()
{
   float pi = 3.14;
   float area, vol;
   int r;

   clrscr();

   printf("\n Enter the Value of r : ");
   scanf("%d", &r);

   area = 4 * pi * r * r;
   vol = 4 / 3 * pi * r * r * r;

   printf("\n Area : %f", area);
   printf("\n Volume : %f", vol);

   getch();
}
```

Output

```
Enter the Value of r : 5
Area : 314.000000
Volume : 523.333313
```

6.Write a C program to evaluate simple interest I = P * R * N / 100.

I = Interest Amount.
P = Principal Amount.
R = Rate of Interest per year as a percent.
N = Time Periods involved.

```
#include <stdio.h>
#include <conio.h>

void main()
{
   float p, r, n, i;

   clrscr();

   printf("Enter p : ");
   scanf("%f", &p);

   printf("Enter r : ");
   scanf("%f", &r);

   printf("Enter n : ");
   scanf("%f", &n);

   i = p * r * n / 100;

   printf("Intrest : %.2f", i);
   getch();
}
```

Output

```
Enter p : 1000
Enter r : 5
Enter n : 2
Intrest : 100.00
```

7.Write a C program to enter a distance into K.M and convert it in to meter, feet inches and Centimeter

```
#include <stdio.h>
#include <conio.h>
void main()
{
   float km, f, m, cm, i;

   clrscr();

   printf("Enter Kilometer : ");
   scanf("%f", &km);

   m = km * 1000;
   f = km * 3280.84;
   i = km * 39370;
   cm = km * 100000;

   printf("Meter : %.2f \n", m);
   printf("Feet : %.2f \n", f);
   printf("\n Inch :%.2f \n", i);
   printf("\n Centimeter= %.2f \n", cm);
}
```

Output

```
Enter Kilometer : 1
Meter : 1000.00
Feet : 3280.84
Inch :39370.00
Centimeter= 100000.00
```

8. Write a C program to interchange two numbers.

```
#include <stdio.h>
#include <conio.h>
void main()
{
   int n1, n2, t;

   clrscr();

   printf("Enter n1 : ");
   scanf("%d", &n1);

   printf("\n Enter n2 : ");
   scanf("%d", &n2);

   t = n1;
   n1 = n2;
   n2 = t;

   printf("\n New n1 : %d \n", n1);
   printf("\n New n2 : %d \n", n2);
}
```

Output:

```
Enter  n1: 20
Enter n2: 10

New n1: 10
New n2: 20
```

9. Write a C program to convert Fahrenheit into centigrade.

```
#include <stdio.h>
#include <conio.h>
void main()
{
   int f;
   float c;

   clrscr();

   printf("\nEnter the value of f : ");
   scanf("%d", &f);

   c = (f - 32) / 1.8;
   printf("\nCentigrade : %f", c);
}
```

Output:

```
Enter the value of f : 50
Centigrade: 10.000000
```

10. Write a C program for summation, subtraction, multiplication, division of two number using Arithmetic operator.

```
#include <stdio.h>
#include <conio.h>
void main()
{
   int n1, n2, add, sub, multiply;
   float d;

   clrscr();

   printf("\nEnter n1:");
   scanf("%d", &n1);

   printf("\nEnter n2:");
   scanf("%d", &n2);

   add = n1 + n2;
   sub = n1 - n2;
   multiply = n1 * n2;
   d = n1 / (float)n2;

   printf("\nAddition : %d", add);
   printf("\nSubtraction : %d", sub);
   printf("\nMultiplication : %d", multiply);
   printf("\nDivision : %f", d);

   getch();
}
```

Output:

```
Enter n1:10
Enter n2:20
Addition : 30
Subtraction : -10
Multiplication : 200
Division : 0.500000
```

11. Write a C program to enter days and convert into years, month and reminder days.

```
#include <stdio.h>
#include <conio.h>

void main()
{
   int days, year, mon, rd;

   clrscr();

   printf("Enter Days:");
   scanf("%d", &days);

   year = days / 365;

   printf("Year : %d \n", year);
   printf("Month : %d \n", mon);
getch();
}
```

Output:

```
Enter Days:365
Year : 1
Month : 0
Reminder Day : 0
```

12. Write a C program to find out the largest value from given three numbers using conditional Operator.

```
#include <stdio.h>
#include <conio.h>

void main()
{
   int n1, n2, n3;
   clrscr();

   printf("Enter n1 : ");
   scanf("%d", &n1);

   printf("Enter n2 : ");
   scanf("%d", &n2);

   printf("Enter n3 : ");
   scanf("%d", &n3);

   if (n1 > n2 && n1 > n3)
   {
      printf("n1 is largest");
   }
   else if (n2 > n1 && n2 > n3)
   {
      printf("n2 is largest");
   }
   else
   {
      printf("n3 is largest");
   }
getch();
}
```

Output:

```
Enter n1:30
Enter n2:20
Enter n3:10
n1 is largest
```

13. Write a C program to find the maximum number from given three numbers.

```
#include <stdio.h>
#include <conio.h>
void main()
{
   int n1, n2, n3;

   clrscr();

   printf("Enter n1 : ");
   scanf("%d", &n1);

   printf("Enter n2 : ");
   scanf("%d", &n2);

   printf("Enter n3 : ");
   scanf("%d", &n3);

   if (n1 > n2)
   {
      if (n1 > n3)
      {
         printf(" Largest : %d", n1);
      }
      else
      {
         printf(" Largest : %d", n3);
      }
   }
   else
   {
      if (n2 > n3)
      {
         printf(" Largest : %d", n2);
      }
      else
      {
```

```
            printf(" Largest : %d", n3);
        }
    }
getch();
}
```

Output:

```
Enter n1:30
Enter n2:20
Enter n3:10

Largest : 30
```

14. Write a C program to find that the enter number is Negative, or Positive or Zero.

```
#include <stdio.h>
#include <conio.h>

void main()
{
   int num;
clrscr();
   printf("Enter a number : ");
   scanf("%d", &num);

   if (num > 0)
   {
      printf("%d is a positive number.", num);
   }
   else if (num < 0)
   {
      printf("%d is a negative number.", num);
   }
   else
   {
      printf("You Entered zero");
   }
getch();
}
```

Output:

Enter a number : 5
5 is a positive number.

15. Write a C program to Checked whether entered char is capital, small, digit or any special Character.

```
#include <stdio.h>
#include <conio.h>

void main()
{
   char ch;
   printf("Enter a character: ");
   scanf("%c", &ch);

   if (ch >= 'A' && ch <= 'Z')
   {
      printf("%c is a capital letter.", ch);
   }
   else if (ch >= 'a' && ch <= 'z')
   {
      printf("%c is a small letter.", ch);
   }
   else if (ch >= '0' && ch <= '9')
   {
      printf("%c is a digit.", ch);
   }
   else
   {
      printf("%c is a special character.", ch);
   }
}
```

Output

```
Enter a character: Ami
A is a capital letter.
```

16. Write a C program to read number 1 to 7 and print relatively day Sunday to Saturday.

```
#include <stdio.h>
#include <conio.h>
void main()
{
   int day;
   clrscr();
   printf("Enter Day : ");
   scanf("%d", &day);
   switch (day)
   {
   case 1:
      printf("Sunday");
      break;
   case 2:
      printf("Monday");
      break;
   case 3:
      printf("Tuesday");
      break;
   case 4:
      printf("wednesday");
      break;
   case 5:
      printf("Thursday");
      break;
   case 6:
      printf("Friday");
      break;
   case 7:
      printf("Saturday");
      break;
   default:
      printf("Invalid Day..");
   }
getch();
}
```

Output

```
Enter Day : 3
Tuesday
```

17. Write a C program to find out the max. and min. number from given 10 numbers.

```
#include <stdio.h>
#include <conio.h>
void main()
{
   int n, i, max, min;
   clrscr();
   for (i = 1; i <= 10; i++)
   {
      printf("Enter number : ");
      scanf("%d", &n);

      if (i == 1)
      {
         max = n;
         min = n;
      }
      else
      {
         if (max < n)
         {
            max = n;
         }
         if (min > n)
         {
            min = n;
         }
      }
   }

   printf("Max : %d\n", max);
   printf("Min : %d\n", min);
}
```

Output

```
Enter number : 20
Enter number : 50
Enter number : 80
Enter number : 100
Enter number : 45
Enter number : 90
Enter number : 100
Enter number : 120
Enter number : 67
Enter number : 78
Max : 120
Min : 20
```

18. Write a C program to find the sum of digit of accepted number.

```
#include <stdio.h>
#include <conio.h>

void main()
{
   int num;
   int sum = 0;
   int temp = num;
   int digit;
   printf("Enter Number : ");
   scanf("%d", &num);

   while (num > 0)
   {
      digit = num % 10;
      sum = sum + digit;
      num = num / 10;
   }

   printf("Sum of digits %d is %d ", temp, sum);
}
```

Output

```
Enter Number : 123456
Sum of digits 0 is 21
```

20. Write a C program to display first 25 Fibonacci nos.

```
#include <stdio.h>
#include <conio.h>

void main()
{
   int a = 1, b = 1, c, i;
   clrscr();
   printf("Fibonnaci series :\n");
   printf("%d \n", a);
   printf("%d \n", b);

   for (i = 1; i <= 25; i++)
   {
      c = a + b;
      printf("%d \n", c);
      a = b;
      b = c;
   }
   getch();
}
```

Output

```
46368
75025
121393
196418
```