Assignment - 2

A Job Ready Bootcamp in C++, DSA and IOT MySirG Operators in C
   Language

1. Write a program to print unit digit of a given number

```c
#include<stdio.h>
int main()
{
    int a = 5678;
    printf("%d ", a%10);
    return 0;
}
```

2. Write a program to print a given number without its last
   digit.

```c
#include<stdio.h>
int main()
{
    int a = 5678;
    printf("%d ", a/10);
    return 0;
}
```

3. Write a program to swap values of two `int` variables

```c
#include<stdio.h>
int main()
{
    int a = 5678, b = 15, c;
    c = a;
    a = b;
    b = c;
    printf("a = %d\nb = %d ", a, b);
    return 0;
}
```

4. Write a program to swap values of two `int` variables without using a third variable.

```c
#include<stdio.h>
int main()
{
    int a = 10, b = 15;
    a = a+b;
    b = a-b;
    a = a-b;
```

```c
    printf("a = %d\nb = %d ", a, b);
    return 0;
}
```

5. Write a program to input a three-digit number and display the
   sum of the digits.

```c
#include <stdio.h>
int main()
{
    int n,l,f,m,sum,t1;
    printf("Enter 3-Digit Number: ");
    scanf("%d",&n);
    f=n/100;
    t1=n%100;
    l=t1%10;
    m=t1/10;
    printf("\nFirst Digit  = %d \nMiddle Digit = %d \nLast
  Digit   = %d\n",f,m,l);
    sum=l+m+f;
    printf("\nSum of All 3-Digits : %d",sum);
    return 0;
}
```

6. Write a program which takes a character as an input and
   displays its ASCII code.

```c
#include<stdio.h>
int main()
{
    char c;
    printf("Enter Character: ");
    scanf("%c",&c);
    printf("%d",c);
    return 0;
}
```

7. Write a program to find the position of first 1 in LSB.

```c
#include<stdio.h>
int main()
{
    int n = 6, count = 0, result = 0;
    result = n & 1;
    count++;
    if (result == 1)
    {
      printf("%d",count);
    }
    n = n>>1;
```

```c
        result = n & 1;
        count++;
        if (result == 1)
        {
          printf("%d",count);
        }
}
```

8. Write a program to check whether the given number is even or
   odd using a bitwise operator.

```c
#include<stdio.h>
int main()
{
    int n,a;
    printf("Enter num:");
    scanf("%d", &n);
    if (n & 1)
    {
        printf("Odd");
    }
    else
    {
        printf("Even");
    }
    return 0;
```

```
}


9. Write a program to print size of an int, a float, a char and a
   double type variable

#include<stdio.h>
int main()
{
    int a;
    float b;
    char c;
    double d;
    printf("%d\n",sizeof(a));
    printf("%d\n",sizeof(b));
    printf("%d\n",sizeof(c));
    printf("%d",sizeof(d));
    return 0;
}
```

10. Write a program to make the last digit of a number stored in
    a variable as zero.
(Example - if x=2345 then make it x=2340)


```c
#include<stdio.h>
int main()
{
    int x = 2345, a;
    a = x % 10;
    x = x - a;
    printf("%d", x);
}
```

11. Write a program to input a number from the user and also
    input a digit. Append a
digit in the number and print the resulting number.
(Example - number=234 and digit=9 then the resulting number is
    2349)

```c
#include<stdio.h>
int main()
{
    int a, b;
    printf("Enter a num and digit: ");
    scanf("%d\t%d",&a,&b);
    a = a*10 + b;
```

```c
    printf("\nResult : %d",a);
    return 0;
}
```

12. Assume price of 1 USD is INR 76.23. Write a program to take the amount in INR and convert it into USD.

```c
#include<stdio.h>
int main()
{
    float usd, inr;
    printf("Enter Amount in INR : ");
    scanf("%f",&inr);
    usd = inr * 76.23;
    printf("INR in USD is: %f", usd);
    return 0;
}
```

13. Write a program to take a three-digit number from the user and rotate its digits by one position towards the right.

```c
#include<stdio.h>
int main()
{
```

```c
    int n, x,a;
    printf("Enter Three Digit Num:");
    scanf("%d", &n);
    a = n%10;
    n = n/10;
    n = a*100 + n;
    printf("%d",n);
    return 0;
}
```