Assignment – 2

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

```c
#include<stdio.h>
int main()
{
    int a;
    printf("Enter the number :");
    scanf("%d",&a);
    a%=10;
    printf("Unit digit of given number is %d",a);
    return 0;
}
```

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

```c
#include<stdio.h>
int main()
{
    int a;
    printf("Enter the number :");
    scanf("%d",&a);
    a/=10;
    printf("Number without last digit is %d",a);
    return 0;
}
```

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

```c
#include<stdio.h>
int main()
{
    int a,b;
    printf("Enter 2 numbers :");
    scanf("%d%d",&a,&b);
    printf("Before swaping x=%d y=%d\n",a,b);
    a=a+b;
    b=a-b;
    a=a-b;
    printf("After swaping x=%d y=%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,b;
    printf("Enter 2 numbers :");
    scanf("%d%d",&a,&b);
    printf("Before swaping x=%d y=%d\n",a,b);
    a=a*b;
    b=a/b;
    a=a/b;
    printf("After swaping x=%d y=%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 a,i,rem,sum=0;
    printf("Enter three digit number :");
    scanf("%d",&a);
    for(i=0;i<3;i++)
    {
        rem = a%10;
        sum+=rem;
        a=a/10;
    }
    printf("Sum = %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 a;
    int x;
    printf("Enter any character :");
    scanf("%c",&a);
    x=a;
    printf("ASCII Code of %c is %d ",a,x);
    return 0;
}
```

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

```c
#include<stdio.h>
int main()
{
    int a,i=1;
    printf("Enter the number :");
    scanf("%d",&a);
    while(a>0)
    {
        if((a%2)==1)
        {
            printf("%d",i);
            break;
        }
        i++;
        a=a/2;
    }
    return 0;
}
```

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 a;
    printf("Enter the number :");
```

```
    scanf("%d",&a);
    if((a&1)==0)
    {
        printf("Even");
    }
    else
    {
        printf("Odd");
    }
    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("size of int = %d \n",sizeof(a));
    printf("size of float = %d \n",sizeof(b));
    printf("size of char = %d \n",sizeof(c));
    printf("size of double = %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)

```
#include<stdio.h>
int main()
{
    int a,c;
    printf("Enter the number :");
    scanf("%d",&a);
    c=a/10;
    c=c*10;
    printf("Number is %d",c);
    return 0;
}
```

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)

```
#include<stdio.h>
int main()
{
    int a,b,c;
    printf("Enter the number :");
    scanf("%d",&a);
    printf("Enter the number that will append :");
    scanf("%d",&b);
    c=a*10;
    c=c+b;
    printf("Number is %d",c);
    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,rs;
    printf("Enter the amount in rupees :");
    scanf("%f",&rs);
    usd = rs / 76.23 ;
    printf("USD : %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()
{
    int a,b;
    printf("Enter three digit number :");
    scanf("%d",&a);
    b=a%10;
    a=a/10;
    b=b*1000;
    b=b+a;
    printf("After right rotation : %d",b);
    return 0;
}
```