Operators in C Language

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

Ans:-

```
#include<stdio.h>
#include<conio.h>
int main()
{
    int a=123, num;
    num=a%10;
    printf("Unit digit is %d",num);
getch();
return 0;
}
```

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

```
#include<stdio.h>
#include<conio.h>
int main()
{
    int a=123, num;
    num=a/10;
    printf("Unit digit is %d",num);
getch();
return 0;
}
```

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

Ans:-

```
#include<stdio.h>
#include<conio.h>
int main()
{
    int a=5, b=6,c;
    printf("Before swapping:\n");
    printf("a=%d\nb=%d\n",a,b);
    c=a;
    a=b;
    b=c;
    printf("After swapping:\n");
    printf("a=%d\nb=%d",a,b);
getch();
return 0;
}
```

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

```
#include<stdio.h>
#include<conio.h>
int main()
{
    int a=5, b=6,c;
    printf("Before swapping:\n");
    printf("a=%d\nb=%d\n",a,b);
    a=a+b;
    b=a-b;
    a=a-b;
    printf("After swapping:\n");
    printf("a=%d\nb=%d",a,b);
getch();
return 0;
}
```

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

Ans:-

```
#include<stdio.h>
#include<conio.h>
int main()
{
    int a,r,num=0;
    printf("Input a three digit number: ");
    scanf("%d",&a);
    while(1)
    {
        r=a%10;
        if(r==0)
    {
            printf("the sum of the digits: %d",num);
            break;
      }
      num=num+r;
      a=a/10;
      }
getch();
return 0;
}
```

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

```
#include<stdio.h>
#include<conio.h>
int main()
{
    char a;
    printf("Input a character: ");
    scanf("%c",&a);

    printf("ASCII code of %c is %d",a,a);

getch();
return 0;
}
```

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

```
#include<stdio.h>
int main()
{
    int arr[5];
    printf("Input five integers: ");
    for (int i = 0; i < 5; i++)
    {
        scanf("%d",&arr[i]);
    }
    int n=arr[0];
    for (int i = 0; i < 5; i++)
    {
        if(arr[i]<n)
        n=arr[i];
    }
    printf("Least value is %d",n);

return 0;
}</pre>
```

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

Ans:-

```
#include<stdio.h>
#include<conio.h>
int main()
{
    int x;
    printf("Input a number: ");
    scanf("%d",&x);
    if((x&1)==0)
    printf("Even");
    else
    printf("Odd");
    getch();
    return 0;
}
```

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

```
#include<stdio.h>
#include<conio.h>
int main()
{
    printf("Size of an int is %d\n", sizeof(int));
    printf("Size of a float is %d\n", sizeof(float));
    printf("Size of a char is %d\n", sizeof(char));
    printf("Size of a double is %d\n", sizeof(double));
    getch();
    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)

Ans:-

```
#include<stdio.h>
#include<conio.h>
int main()
{
    int x=2345;
    x=x/10;
    x=x*10;
    printf("The number is %d",x);
    getch();
    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

(Example – number = 234 and digit = 9 then the resulting number is 2349)

```
#include<stdio.h>
#include<conio.h>
int main()
{
    int x,d,num;
    printf("Input a number: ");
    scanf("%d",&x);
    printf("Input a digit: ");
    scanf("%d",&d);
    num=x*10+d;

    printf("The number is %d",num);
    getch();
    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.

Ans:-

```
#include<stdio.h>
#include<conio.h>
int main()
{
    float amt,USD;
    printf("Enter amount in INR.: ");
    scanf("%f",&amt);
    USD=amt/76.23;
    printf("%.2f INR is %.2f USD",amt,USD);
    getch();
    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.

```
#include<stdio.h>
#include<conio.h>
int main()
{
    int n;
    printf("Input a three digit number: ");
    scanf("%d",&n);
    printf("The number is %d", n>>1);
    getch();
    return 0;
}
```