

# Assignment-2

## Operators in C language

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

```
#include <stdio.h>

int main() {
    // Write C code here

    int x = 52;
    int temp;
    temp = x%10;

    printf("%d",temp);

    return 0;
}
```

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

```
#include <stdio.h>

int main() {
    // Write C code here

    int x ;
    int result;

    printf("enter a number:");
    scanf("%d",&x);
    result = x/10;
    printf("the result is %d",result);

    return 0;
}
```

Que -3 ) Write a program to swap values of two int variables

```
#include <stdio.h>

int main() {
    // Write C code here

    int a,b;
    printf("enetr two numbers");
    scanf("%d%d",&a,&b);

    int temp;        //declare a variable third

    //swap nthe numbers
    temp = a;
    a = b;
    b = temp;

    printf("swapped numbers are : a= %d and b =%d",a,b );

    return 0;
}
```

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

```
#include<stdio.h>

int main(){
    int a,b;

    printf("enter two numbers");
    scanf("%d%d",&a,&b);
    //swap variables
    a = a+b;
    b = a-b;
    a=a-b;
    printf("ans is a = %d and b = %d",a,b);
    return 0;
}
```

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

```
#include<stdio.h>

int main(){
```

```

int a;
int sum =0;
printf("enter number ");
scanf("%d",&a);
while(a!=0){

    int lastdigit = a%10;
    sum = sum + lastdigit;
    a= a/10;
}

printf(" sum is %d",sum);
return 0;
}

```

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

```

#include<stdio.h>

int main(){
    char a;
    printf("enter number ");
    scanf("%c",&a);

    printf(" ascii is %d",a);
    return 0;
}

```

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

```

#include <stdio.h>

int main()
{
    int num;

    /* Input number from user */
    printf("Enter any number: ");
    scanf("%d", &num);

    /* If (num & 1) evaluates to 1 */
    if(num & 1)
        printf("LSB of %d is (1).", num);
    else

```

```
    printf("LSB of %d is (0).", num);  
    return 0;  
}
```

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

```
#include <stdio.h>  
  
int main()  
{  
    int x;  
  
    printf("enter the number");  
    scanf("%d",&x);  
  
    if(x&1 ==1){  
        printf("number is odd\n");  
    }  
    else{  
        printf("number is even\n");  
    }  
    return 0;  
}
```

Que-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 x;  
    int k;  
    printf("enter the number");  
    scanf("%d",&x);  
    x = sizeof(k);  
    printf("type size is %d ",x) ;  
    return 0;  
}
```

```
#include <stdio.h>  
int main()  
{  
    int x;  
    char k;  
    printf("enter the number");  
    scanf("%d",&x);  
    x = sizeof(k);
```

```
printf("type size is %d ",x) ;  
return 0;  
}
```

```
#include <stdio.h>  
int main()  
{  
    int x;  
    float k;  
    printf("enter the number");  
    scanf("%d",&x);  
    x = sizeof(k);  
    printf("type size is %d ",x) ;  
    return 0;  
}
```

```
#include <stdio.h>  
int main()  
{  
    int x;  
    double k;  
    printf("enter the number");  
    scanf("%d",&x);  
    x = sizeof(k);  
    printf("type size is %d ",x) ;  
    return 0;  
}
```

Que -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)

```
int main()  
{  
    int num;  
  
    /* Input number from user */  
    printf("Enter any number: ");  
    scanf("%d", &num);  
  
    int rem = num%10;  
    rem =0 ;
```

```

        num=num/10;
        rem = 0;
        num = num*10+rem;

    printf("number is %d" ,num);
    return 0;
}

```

Que -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>
#include <string.h>

int main()
{
    char num[20] ,digit[20];
    char result[20];

    /* Input number from user */
    printf("Enter any number ");
    scanf("%s", num);
    printf("Enter any n digit:" );
    scanf("%s", digit);

    strcat(num,digit);

    printf("the result of append is %s:",num);
    return 0;
}

```

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

```

#include <stdio.h>
#include <string.h>

int main()
{

```

```

int amount ;
float usd;

/* Input number from user */
printf("Enter any amount ");
scanf("%d", &amount);

//converting the INR into usd

usd = (amount*76.23);

printf("the result of append is %f usd:",usd);
return 0;
}

```

Que - 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>
int main(){

    char num[20];
    printf("enter the number : ");
    scanf(" %s",num);

    char temp = num[1];
    num[1] = num[0];
    num[0] = temp;
    char temp2 = num[1];
    num[1] = num[2];
    num[2] = temp2;

    printf("%s" , num);
    return 0;
}

```