

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.

```
#include<stdio.h>
int main()
{
    int a=123,x;
    x=a%10;
    printf("Unit digit = %d",x);
    return 0;
}
```
2. Write a program to print a given number without its last digit.

```
#include<stdio.h>
int main()
{
    int a=123,x;
    x=a/10;
    printf("Without last digit = %d",x);
    return 0;
}
```
3. Write a program to swap values of two int variables

```
#include<stdio.h>
int main()
{
    int a=5,b=10,c,d;
    c=a,d=b;
    b=c,a=d;
    printf("a = %d",a);
    printf("\nb = %d",b);
    return 0;
}
```
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 digit number");
    scanf("%d%d",&a,&b);
    a=a+b;
    b=a-b;
    a=a-b;
    printf("After swap values are %d %d ",a,b);
    return 0;
}
```

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

```
#include<stdio.h>
int main()
{
    int a,rem=0,sum=0;
    printf("Enter three digit number");
    scanf("%d",&a);
    rem=a%10;
    a=a/10;
    sum=sum+rem;
    rem=a%10;
    a=a/10;
    sum=sum+rem;
    rem=a%10;
    a=a/10;
    sum=sum+rem;
    printf("Enter digit sum is %d ",sum);
    return 0;
}
```

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

```
#include<stdio.h>
int main()
{
    char x;
    printf("\nEnter a character ");
    scanf("%c",&x);
    printf("\n ASCII Code is %d",x);
}
```

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

```
#include<stdio.h>
int main()
{
    int x, position=0;
    printf("Enter a number");
    scanf("%d",&x);

    int result =0;

    while(x!=0)
    {
        result = x&1;
```

```

position++;
if(result==1)
{
    printf("%d",position);
    break;
}

x=x>>1;
}

return 0;
}

```

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 a number");
    scanf("%d",&x);

    int result=x&1;

    if(result==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

| <u>int</u> | <u>float</u> | <u>char</u> | <u>double</u> |
|--|--|---|---|
| <pre> int main() { int x; x=sizeof(int); printf("%d",x); } </pre> | <pre> int main() { int x; x=sizeof(float); printf("%d",x); } </pre> | <pre> int main() { int x; x=sizeof(char); printf("%d",x); } </pre> | <pre> int main() { int x; x=sizeof(double); printf("%d",x); } </pre> |

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 x;
    printf("Enter a number");
    scanf("%d",&x);

    x=x/10;
    x=x*10;

    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)

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

```
int main()
{
    int x,y;

    printf("Enter a number and a digit");

    scanf("%d%d",&x,&y);

    printf("%d%d",x,y);
}
```

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>
```

```
int main()
{
    int x;
    printf("Enter the amount in INR");
    scanf("%d",&x);

    //1 USD = INR 76.23
    x=x*76.23;
    printf("%d",x);
}
```

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()
{
    int x;
    printf("Enter a three number");
    scanf("%d",&x);

    x=x%10*100 + x/10 ;

    printf("New Number = %d",x);
}
```