**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* n;

    scanf("%d", &n);

    printf("The number is : %d", n);

    printf("\nIts unit digit is : %d", n % 10);

    return 0;

}

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

#include <stdio.h>

*int* main()

{

*int* x, a;

    printf("Enter a number: ");

    scanf("%d", &x);

    a = x / 10;//45

    printf("\nAfter removing last digit: %d",a);

    return 0;

}

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

#include <stdio.h>

*int* main()

{

*int* a, b, swap;

    printf("Enter A = ");

    scanf("%d", &a);

    printf("Enter B = ");

    scanf("%d", &b);

    swap = a;

    a = b;

    b = swap;

    printf("After swapping A = %d", a);

    printf("\nAfter swapping B = %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* x, y;

    printf("Enter A = ");

    scanf("%d", &x);

    printf("Enter B = ");

    scanf("%d", &y);

    x = x + y;

    y = x - y;

    x = x - y;

    printf("After swapping A = %d", x);

    printf("\nAfter swapping B = %d", y);

    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, o, n, e, sum;

    printf("Enyer a 3-digit number = ");

    scanf("%d", &a);

    o = a % 10;

    n = a / 10 % 10;

    e = a / 100 % 10;

    printf("Digit at 1’s place-%d", o);

    printf("\nDigit at 10th place-%d", n);

    printf("\nDigit at 100th place-%d", e);

    sum = o + n + e;

    printf("Sum of the digits = %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* a;

    printf("Enter any character : ");

    scanf("%c", &a);

    printf("Its ASCII value is : %d", a);

    return 0;

}

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

#include <stdio.h>

*int* main()

{

*int* x, count = 0;

*int* result = 0;

    scanf("%d", &x);

    while (x != 0)

    {

        result = x & 1;

        count++;

        if (result == 1)

        {

            printf("%d", count);

            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* number;

    printf("Enter a number to check even or odd: ");

    scanf("%d", &number);

    if ((number & 1) == 0)

        printf("%d is even.", number);

    else

        printf("%d is odd.", number);

    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()

{

    printf("%d", sizeof(*int*));

    printf("\n%d", sizeof(*float*));

    printf("\n%d", sizeof(*char*));

    printf("\n%d", sizeof(*double*));

    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* o, num;

    printf("Enter X: ");

    scanf("%d", &num);

    o = num % 10;

    o = num - 5;

    printf("X = %d", o);

    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, result;

    printf("Enter the number: ");

    scanf("%d", &a);

    printf("Enter the digit to be appended: ");

    scanf("%d", &b);

    result = a \* 10 + b;

    printf("New number is : %d", result);

    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.**

#include <stdio.h>

*int* main()

{

*float* inr;

    printf("Enter the amount in INR : Rs ");

    scanf("%f", &inr);

*float* USD;

    USD = inr / 76.23;

    printf("Above amount in 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.**

#include <stdio.h>

*int* main()

{

*int* a, b, s, x;

    printf("Enter a 3-digit number = ");

    scanf("%d", &a);

    s = a % 10;

    b = a / 10;

    x = s \* 100 + b;

    printf("%d", x);

    return 0;

}