1. Write a C program to compute the sum of the two input values. If the two values are the same,

then print triple their sum.

#include<stdio.h>

 void main()

 {

    int a, b, sum;

    printf("Enter two numbers\n");

    scanf("%d %d", &a, &b);

    sum = a + b;

    if (a == b)

        printf("%d\n", sum \* 3);

    else

        printf("Sum: %d\n", sum);

 }

Output

Enter two numbers

3 7

Sum: 10

Enter two numbers

4 4

24

2. Write a C program to check whether a given positive number is a multiple of both 3 and 7.

#include<stdio.h>

void main()

{

    int n;

    printf("Enter a number\n");

    scanf("%d", &n);

    if (n % 7 == 0 && n % 3 == 0)

        printf("%d is a multiple of both 3 and 7\n", n);

    else

        printf("%d is not a multiple of both 3 and 7\n", n);

}

Output

Enter a number

42

42 is a multiple of both 3 and 7

Enter a number

50

50 is not a multiple of both 3 and 7

3. Write a C program to check whether two given integer values are in the range 20 to 50. Print true

if 1 or other is in the said range otherwise false.

#include<stdio.h>

void main()

{

    int a, b;

    printf("Enter two numbers\n");

    scanf("%d %d", &a, &b);

    if ((a >= 20 && a <= 50 ) ^ (b >= 20 && b <= 50))

        printf("True");

    else

        printf("False");

}

Output

Enter two numbers

30 40

False

Enter two numbers

10 60

False

Enter two numbers

30 10

True

Enter two numbers

40 60

True

4. Write a C program to print the average of first 5 even numbers from 1 to 10

#include<stdio.h>

void main()

{

    int i, sum = 0, avg;

    for(i = 2; i <= 10; i = i + 2)

        sum = sum + i;

    avg = sum / 5;

    printf("Average: %d\n", avg);

}

Output

Average: 6

5. Write a C program to find if a number is a prime number or not

#include<stdio.h>

void main()

{

    int n, i, test = 0;

    printf("Enter the number\n");

    scanf("%d", &n);

    for(i = 2; i < n/2; i++)

    {

        if(n % i == 0)

        {

            test = 1;

            break;

        }

    }

    if (test == 0)

        printf("%d is a prime number\n", n);

    else

        printf("%d is not a prime number\n", n);

}

Output

Enter the number

31

31 is a prime number

Enter the number

12

12 is not a prime number

6. Write a C program to display all integers within the range 100-150 whose sum of digits is an even

Number

#include<stdio.h>

void main()

{

    int n, i, sum = 0;

    for(i = 100; i <= 150; i++)

    {

        n = i;

        while (n > 0)

        {

            sum = sum + (n % 10);

            n = n / 10;

        }

        if (sum % 2 == 0)

            printf("%d ", i);

        sum = 0;

    }

}

Output

101 103 105 107 109 110 112 114 116 118 121 123 125 127 129 130 132 134 136 138 141 143 145 147 149 150

7. Write a C program to generate the prime numbers from 1 to N

#include<stdio.h>

void main()

{

    int n, i, j, factor = 2;

    printf("Enter the upper limit\n");

    scanf("%d", &n);

    for(i = 2; i <= n; i++)

    {

        for(j = 2; j < i; j++)

        {

            if (i % j == 0)

                factor++;

        }

        if(factor == 2)

            printf("%d ", i);

        factor = 2;

    }

}

Output

Enter the upper limit

40

2 3 5 7 11 13 17 19 23 29 31 37

8. Write a C program to print n terms of Fibonacci series

#include<stdio.h>

void main()

{

    int n, i, a = 1, b = 1, temp;

    printf("Enter number of elements\n");

    scanf("%d", &n);

    printf("1\n1\n");

    for(i = 3; i <= n; i++)

    {

        temp = a;

        a = a + b;

        printf("%d\n", a);

        b = temp;

    }

}

Output

Enter number of elements

20

1

1

2 3 5 8 13 21 34 55 89 144 233 377 610 987 1597 2584 4181 6765

9. Write a C program to count the number of employees whose salary is between 10,000 to 20,000

#include<stdio.h>

void main()

{

    int employees, salary, i, n = 0;

    printf("Enter number of employees\n");

    scanf("%d", &employees);

    for(i = 1; i <= employees; i++)

    {

        printf("Enter salary of employee %d\n", i);

        scanf("%d", &salary);

        if (salary >= 10000 && salary <= 20000)

            n++;

    }

    printf("No. of employees satisfying the criteria is %d\n", n);

}

Output

Enter number of employees

5

Enter salary of employee 1

13000

Enter salary of employee 2

15000

Enter salary of employee 3

7000

Enter salary of employee 4

30000

Enter salary of employee 5

14000

No. of employees satisfying the criteria is 3

10. Write a C program to check if an entered character is an Vowels or consonants

#include <stdio.h>

void main()

{

    char a;

    printf("Enter a character\n");

    scanf("%c", &a);

    if (a == 'a' || a == 'A'|| a == 'e'|| a == 'E'|| a == 'i'|| a == 'I'|| a == 'o'|| a == 'O'|| a == 'u'|| a == 'U')

        printf("%c is a vovel\n", a);

    else

        printf("%c is a consonant\n", a);

}

Output

Enter a character

t

t is a consonant

Enter a character

U

U is a vovel

Enter a character

e

e is a vovel

Enter a character

K

K is a consonant

11. Write a C program to check if an entered character if lowercase or upper case.

#include<stdio.h>

void main()

{

    char a;

    printf("Enter a character\n");

    scanf("%c", &a);

    if (a >= 'a' && a <= 'z')

        printf("%c is lowercase\n", a);

    else

        printf("%c is uppercase\n", a);

}

Output

Enter a character

T

T is uppercase

Enter a character

h

h is lowercase

12. Write a C program to count frequency of digits in a given number and print it

#include <stdio.h>

void main()

{

    int num, i, tally = 0, n;

    printf("Enter a number\n");

    scanf("%d", &num);

    for (i = 0; i <= 9; i++)

    {

        n = num;

        while (n > 0)

        {

            if (n % 10 == i)

                tally++;

            n = n / 10;

        }

        printf("Frequency of %d in given number: %d\n", i, tally);

        tally = 0;

    }

}

Output

Enter a number

6263001834

Frequency of 0 in given number: 1

Frequency of 1 in given number: 1

Frequency of 2 in given number: 0

Frequency of 3 in given number: 2

Frequency of 4 in given number: 1

Frequency of 5 in given number: 1

Frequency of 6 in given number: 1

Frequency of 7 in given number: 0

Frequency of 8 in given number: 2

Frequency of 9 in given number: 1