1)FACTORIAL USING FUNCTION

#include <iostream>

using namespace std;

int main()

{

int i,fact=1,number;

cout<<"Enter any Number: ";

cin>>number;

for(i=1;i<=number;i++){

fact=fact\*i;

}

cout<<"Factorial of " <<number<<" is: "<<fact<<endl;

return 0;

}

2)PRIME NUMBER USING FUNCTION

#include <iostream>

using namespace std;

bool check\_prime(int);

int main() {

int n;

cout << "Enter a positive integer: ";

cin >> n;

if (check\_prime(n))

cout << n << " is a prime number.";

else

cout << n << " is not a prime number.";

return 0;

}

bool check\_prime(int n) {

bool is\_prime = true;

// 0 and 1 are not prime numbers

if (n == 0 || n == 1) {

is\_prime = false;

}

for (int i = 2; i <= n / 2; ++i) {

if (n % i == 0) {

is\_prime = false;

break;

}

}

return is\_prime;

}

3)REVERSE OF A STRING USING FUNCTION

#include <bits/stdc++.h>

using namespace std;

void reverseStr(string& str)

{

int len = str.length();

int n = len-1;

int i = 0;

while(i<=n){

swap(str[i],str[n]);

n = n-1;

i = i+1;

}

}

int main()

{

string str = "geeksforgeeks";

reverseStr(str);

cout << str;

return 0;

}

4)MIN AND MAX ELEMENTS USING ARRAY

#include <bits/stdc++.h>

using namespace std;

int main()

{

int arr[] = { 1, 45, 54, 71, 76, 12 };

int n = sizeof(arr) / sizeof(arr[0]);

cout << "Array: ";

for (int i = 0; i < n; i++)

cout << arr[i] << " ";

cout << "\nMin Element = "

<< \*min\_element(arr, arr + n);

cout << "\nMax Element = "

<< \*max\_element(arr, arr + n);

int &min = \*min\_element(arr,arr+n );

int &max = \*max\_element(arr,arr+n );

cout<<"\nFinding the Element using address variable";

cout<<"\nMin Element = "<<min;

cout<<"\nMax Element = "<<max;

return 0;

}

5)GCD OF TWO NUMBERS USING FUNCTION

#include <iostream>

using namespace std;

int gcd(int a, int b) {

if (b == 0)

return a;

return gcd(b, a % b);

}

int main() {

int a = 105, b = 30;

cout<<"GCD of "<< a <<" and "<< b <<" is "<< gcd(a, b);

return 0;

}

6)FUNCTIONS TO COUNT ELEMENTS IN THE STRING

#include <bits/stdc++.h>

using namespace std;

int main()

{

int arr[] = { 3, 2, 1, 3, 3, 5, 3 };

int n = sizeof(arr) / sizeof(arr[0]);

cout <<

" Number of times 3 appears : "

<< count(arr, arr + n, 3);

return 0;

7)CONVERT CELCUIS TO FARHENHIT

#include <iostream>

using namespace std;

double celsiusToFahrenheit(double celsius) {

return (celsius \* 9 / 5) + 32;

}

double fahrenheitToCelsius(double fahrenheit) {

return (fahrenheit - 32) \* 5 / 9;

}

int main() {

double celsius, fahrenheit;

cout << "Enter temperature in Celsius: ";

cin >> celsius;

fahrenheit = celsiusToFahrenheit(celsius);

cout << "Temperature in Fahrenheit: " << fahrenheit << endl;

cout << "Enter temperature in Fahrenheit: ";

cin >> fahrenheit;

celsius = fahrenheitToCelsius(fahrenheit);

cout << "Temperature in Celsius: " << celsius << endl;

return 0;

}

8)AREA OF CIRCLE USING FUNCTION

#include <iostream>

using namespace std;

const double PI = 3.14159;

double calculateArea(double radius) {

return PI \* radius \* radius;

}

int main() {

double radius;

cout << "Enter the radius of the circle: ";

cin >> radius;

if (radius < 0) {

cout << "Radius cannot be negative." << endl;

return 1;

}

double area = calculateArea(radius);

cout << "The area of the circle with radius " << radius << " is: " << area << endl;

return 0;

}

9)PALINDROME USING FUNCTION

#include <iostream>

#include <string>

using namespace std;

bool isPalindrome(const string& str) {

int left = 0;

int right = str.length() - 1;

while (left < right) {

if (str[left] != str[right])

return false;

left++;

right--;

}

return true;

}

int main() {

string input;

cout << "Enter a string: ";

cin >> input;

if (isPalindrome(input))

cout << "The string is a palindrome." << endl;

else

cout << "The string is not a palindrome." << endl;

return 0;

}