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# **Assignment 01**

# Write a C program to calculate area and circumference of a circle.

#include<stdio.h>

void main()

{

float radius, area, cf;

printf("Enter Radius of Circle\n");

scanf("%f",&radius);

//value of pi is 3.14

area=3.14\*radius\*radius;

printf("The area of Circle is %f",area);

cf=2\*3.14\*radius;

printf("\nThe Circumference of Circle is %f",cf);

}

# Write a program to find the largest and smallest among three entered numbers and display whether the identified largest/smallest number is even or odd.

#include<stdio.h>

#include<limits.h>

void main ()

int min, max, i, n, num;

min = INT\_MAX;

max = INT\_MIN;

printf("How many numbers do you want to enter: ");

scanf ("%d", &n) ;

for (i=0; i‹n; i++)

printf ("Number-%d: ", i+1); scanf ("%d", &num) ;

if(num>max)

if(num<min)

max = num;

min = num;

}

printf ("Smallest number = %d \nLargest number = %d", min, max) ;

}

# 

# Write a program to find the factorial of a number.

#include ‹iostream> using namespace std;

int main () {

int n;

long factorial = 1.0;

cout < "Enter a positive integer: "; cin >> n;

if (n < 0)

else {

cout < "Error! Factorial of a negative number doesn't exist.";

for (int i = 1; i <= n; ++i) {

factorial \*= i;

｝

cout <<

"Factorial of " << n <<

" = " << factorial;

}

return

0;

# 

# Program to check whether given string is palindrome or not. For example: KAYAK, RADAR

#include <bits/stdc++.h>

using namespace std;

string isPalindrome(string S)

{

string P = S;

reverse(P.begin(), P.end());

if (S == P) {

return "Yes";

}

else {

return "No";

}

}

int main()

{

string S = "ABCDCBA";

cout << isPalindrome(S);

return 0;

}

# Program to convert lowercase to uppercase and uppercase to lowercase.

#include <iostream>

using namespace std;

void convertOpposite(string& str)

{

int ln = str.length();

for (int i = 0; i < ln; i++) {

if (str[i] >= 'a' && str[i] <= 'z')

str[i] = str[i] - 32;

else if (str[i] >= 'A' && str[i] <= 'Z')

str[i] = str[i] + 32;

}

}

int main()

{

string str = "GeEkSfOrGeEkS";

convertOpposite(str);

cout << str;

return 0;

}

# Program to sort an array of 10 strings.

#include <iostream>

#include <string>

#include <algorithm>

using namespace std;

int main() {

int z = 0;

string name[] = {"john", "bobby", "dear", "test1", "catherine", "nomi", "shinta", "martin", "abe", "may", "zeno", "zack", "angeal", "gabby"};

sort(begin(name),end(name));

for(auto n: name){

cout << n << endl;

}

return 0; }

# Program to accept a string and display it in reverse.

#include <bits/stdc++.h>

using namespace std;

void reverseStr(string& str)

{

int n = str.length();

for (int i = 0; i < n / 2; i++)

swap(str[i], str[n - i - 1]);

}

int main()

{

string str = "geeksforgeeks";

reverseStr(str);

cout << str;

return 0;

}