#include<stdio.h>

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// Practice Questions

int welcome ();

int main() {

printf("Before Welcome\n");

welcome();

printf("After welcome\n");

}

int welcome()

{

printf("Welcome to C\n");

}

\*/

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#include<stdio.h>

int square(int);

int main() {

int num,res;

printf("Enter a number:\n");

scanf("%d",&num);

res=square(num);

printf("square of the entered number is %d",res);

}

int square(int x)

{

return(x\*x);

}

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#include<stdio.h>

int factorial(int n) {

if (n==1) {

return 1;

}

return n \* factorial ( n- 1);

}

int main() {

int num;

Printf("Enter a number:\n");

scanf("%d",&num);

printf("The factorial of %d is %d,num,factorial(num)");

return 0;

}

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#include <stdio.h>

int calculateArea(int side) {

return side \* side;

}

int calculatePerimeter(int side) {

return 4 \* side;

}

int main() {

int side, area, perimeter;

printf("Enter the side of the square: ");

scanf("%d", &side);

area = calculateArea(side);

perimeter = calculatePerimeter(side);

printf("Area of the square: %d\n", area);

printf("Perimeter of the square: %d\n", perimeter);

return 0;

}

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#include <stdio.h>

int findMax(int a, int b, int c) {

if (a > b && a > c)

return a;

else if (b > c)

return b;

else

return c;

}

int main() {

int num1, num2, num3, max;

printf("Enter three numbers: ");

scanf("%d %d %d", &num1, &num2, &num3);

max = findMax(num1, num2, num3);

printf("The maximum number is: %d\n", max);

return 0;

}

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#include <stdio.h>

int absoluteValue(int x) {

return (x < 0) ? -x : x;

}

int main() {

int x;

printf("Enter a number: ");

scanf("%d", &x);

printf("The absolute value is: %d\n", absoluteValue(x));

return 0;

}

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#include <stdio.h>

void bubbleSort(int arr[], int n) {

for (int i = 0; i < n - 1; i++) {

for (int j = 0; j < n - i - 1; j++) {

if (arr[j] > arr[j + 1]) {

int temp = arr[j];

arr[j] = arr[j + 1];

arr[j + 1] = temp;

}

}

}

}

void printArray(int arr[], int n) {

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

printf("%d ", arr[i]);

}

printf("\n");

}

int main() {

int n;

printf("Enter the number of elements: ");

scanf("%d", &n);

int arr[n];

printf("Enter the elements:\n");

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

scanf("%d", &arr[i]);

}

bubbleSort(arr, n);

printf("Sorted array: ");

printArray(arr, n);

return 0;

}

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#include <stdio.h>

float add(float a, float b) {

return a + b;

}

float subtract(float a, float b) {

return a - b;

}

float multiply(float a, float b) {

return a \* b;

}

float divide(float a, float b) {

if (b != 0)

return a / b;

else {

printf("Error: Division by zero!\n");

return 0;

}

}

int main() {

float num1, num2, result;

char operator;

printf("Enter an operation (e.g., 5 + 3): ");

scanf("%f %c %f", &num1, &operator, &num2);

switch (operator) {

case '+':

result = add(num1, num2);

break;

case '-':

result = subtract(num1, num2);

break;

case '\*':

result = multiply(num1, num2);

break;

case '/':

result = divide(num1, num2);

break;

default:

printf("Invalid operator!\n");

return 1;

}

printf("Result: %.2f\n", result);

return 0;

}

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#include <stdio.h>

int factorial(int n) {

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

return 1;

return n \* factorial(n - 1);

}

int main() {

int num;

printf("Enter a number: ");

scanf("%d", &num);

if (num < 0)

printf("Factorial is not defined for negative numbers.\n");

else

printf("The factorial of %d is: %d\n", num, factorial(num));

return 0;

}

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#include <stdio.h>

void decimalToBinary(int decimal) {

if (decimal == 0) {

printf("0");

return;

}

int binary[32], i = 0;

while (decimal > 0) {

binary[i++] = decimal % 2;

decimal /= 2;

}

for (int j = i - 1; j >= 0; j--) {

printf("%d", binary[j]);

}

}

int main() {

int num;

printf("Enter a decimal number: ");

scanf("%d", &num);

printf("Binary equivalent: ");

decimalToBinary(num);

printf("\n");

return 0;

}

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#include <stdio.h>

#include <stdbool.h>

bool isPrime(int n) {

if (n <= 1)

return false;

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

if (n % i == 0)

return false;

}

return true;

}

int main() {

int num;

printf("Enter a number: ");

scanf("%d", &num);

if (isPrime(num))

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

else

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

return 0;

}

\*/