TASK No:1

int x = 1;

do {

cout << "enter a number: ";

cin >> x;

} while (x > 0);

Task #include <iostream>

using namespace std;

int main() {

int num1, num2, choice;

char again;

do {

cout << "Enter two numbers: ";

cin >> num1 >> num2;

cout << "Choose an operation:\n";

cout << "1. Addition\n";

cout << "2. Subtraction\n";

cout << "3. Multiplication\n";

cout << "4. Division\n";

cin >> choice;

switch (choice) {

case 1:

cout << num1 << " + " << num2 << " = " << num1 + num2 << endl;

break;

case 2:

cout << num1 << " - " << num2 << " = " << num1 - num2 << endl;

break;

case 3:

cout << num1 << " \* " << num2 << " = " << num1 \* num2 << endl;

break;

case 4:

if (num2 == 0) {

cout << "Cannot divide by zero\n";

} else {

cout << num1 << " / " << num2 << " = " << (double)num1 / num2

<< endl;

}

break;

default:

cout << "Invalid choice\n";

}

cout << "Do you want to continue? (y/n): ";

cin >> again;

} while (again == 'y' || again == 'Y');

return 0;

}

Task no:3

a.

#include <iostream>

using namespace std;

int main()

{

int sum = 0;

int n = 2;

while (n <= 100) {

sum += n;

n += 2;

}

cout << "The sum of all even numbers between 2 and 100 is " << sum << endl;

return 0;

}

B.

#include <iostream>

using namespace std;

int main()

{

int sum = 0;

int n = 1;

do {

sum += n \* n;

n++;

} while (n <= 100);

cout << "The sum of all squares between 1 and 100 is " << sum << endl;

return 0;

}

Task no:4

A.

#include <iostream>

Using namespace std;

Int main(){

int n = 0;

int power = 1;

while (n <= 20)

cout << "2^" << n << " = " << power << endl;

power \*= 2;

n++;

}

Return 0;

}

B:

#include <iostream>

Using namespace std;

Int main(){

int a, b, sum = 0; // Declare and initialize the variables

cout << "Enter two numbers: ";

cin >> a >> b; // Read the input from the user

if (a > b) { // Swap the values of a and b if a is greater than b

int temp = a;

a = b;

b = temp;

}

if (a % 2 == 0) { // Make sure a is odd by adding 1 if it is even

a++;

}

while (a <= b) { // Loop until a is greater than b

sum += a; // Add a to the sum

a += 2; // Increment a by 2 to get the next odd number

}

cout << "The sum of all odd numbers between " << a << " and " << b << " is " << sum << endl;

return 0;

}