**TASK ONE**

#include <iostream>

#include <cstdlib>

using namespace std;

int main()

{

int num, guess, numoftries = 0;

// srand(time(0)); //this function sets the starting point for producing a series of pseudo-random integers

num = rand() % 100 + 1; // generates random numbers between 1 and 100

cout <<"Welcome to Number Guessing Game!"<< endl;

cout<<"Please press enter after every entry until the correct answer"<<endl;

do //using the do while loop

{

cout<< "Guess a number between 1 and 100. "<< endl;

cin>> guess;

numoftries++;

if (guess > num)

cout<< "Too high, please try again"<<endl;

else if (guess < num)

cout<< "Too Low, please try again"<<endl;

else

cout<< "You got it in " << numoftries << "guesses" <<endl;

} while (guess != num);

return 0;

}

**TASK TWO**

#include <iostream>

using namespace std;

int main()

{

double num1, num2;

char op;

cout<<"Enter the first number"<<endl;

cin>>num1;;

cout<<"Enter Operator(+, -, /, \*)"<<endl;

cin>>op;;

cout<<"Enter the second number"<<endl;

cin>>num2;

switch(op){

case '+':

cout << num1 + num2;

break;

// If the user enter -

case '-':

cout << num1 - num2;

break;

// If the user enter \*

case '\*':

cout << num1 \* num2;

break;

// If the user enter /

case '/':

cout << num1 / num2;

break;

default:

cout<<"Error! operator is not correct";

}

return 0;

}

**TASK THREE**

#include <iostream>

#include <vector>

#include <string>

using namespace std;

class TodoList {

private:

vector<string> tasks;

public:

void addTask(const string& task) {

tasks.push\_back(task);

cout << "Task added successfully!" << endl;

}

void viewTasks() {

if (tasks.empty()) {

cout << "No tasks available." << endl;

} else {

cout << "Tasks:" << endl;

for (size\_t i = 0; i < tasks.size(); ++i) {

cout << i + 1 << ". " << tasks[i] << endl;

}

}

}

void deleteTask(int index) {

if (index >= 1 && index <= static\_cast<int>(tasks.size())) {

tasks.erase(tasks.begin() + index - 1);

cout << "Task deleted successfully!" << endl;

} else {

cout << "Invalid task index!" << endl;

}

}

};

int main() {

TodoList todoList;

int choice;

string task;

int index;

do {

cout << "1. Add Task" << endl;

cout << "2. View Tasks" << endl;

cout << "3. Delete Task" << endl;

cout << "4. Exit" << endl;

cout << "Enter your choice: ";

cin >> choice;

switch (choice) {

case 1:

cout << "Enter task: ";

cin.ignore(); // Clear input buffer

getline(cin, task);

todoList.addTask(task);

break;

case 2:

todoList.viewTasks();

break;

case 3:

cout << "Enter task index to delete: ";

cin >> index;

todoList.deleteTask(index);

break;

case 4:

cout << "Exiting..." << endl;

break;

default:

cout << "Invalid choice. Please try again." << endl;

}

} while (choice != 4);

return 0;

}