

## 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;
```

```
}
```