**Winning Lottery Numbers**

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# Design Approach

I followed the Linear search code posted on blackboard and then I modified the main() based on the instructions.

# Screen Shots

A screenshot of a cell phone

Description automatically generated

# 

# Source Code

#include <iostream>

#include <string>

#include <vector>

#include<ctime>

**using** **namespace** std;

//from professor's notes

**int** linearSearch(**int** list[], **int** size, **int** key)

{

**for** (**int** i = 0; i < size; i++)

{

**if** (list[i] == key)

**return** i;

}

**return** -1;

}

**void** generateData(**int** numbers[], **int** size)

{

//srand(time(0)); // "seed the random number generator"

**for** (**int** i=0;i<10;i++)

{

numbers[i] = 10000 + rand () % 90000;

}

}

**void** display(**int** numbers[], **int** size)

{

**for** (**int** i = 0; i < size; i++)

cout << numbers[i] << " ";

cout << endl;

}

**int** main() {

**const** **int** array\_SIZE=10;

**int** tickets[array\_SIZE];

**int** winning\_ticket;

generateData(tickets, array\_SIZE);

display(tickets, array\_SIZE);

//prompting user

cout<<"Enter the 5 digit number: ";

cin>>winning\_ticket;

**int** index=linearSearch(tickets, array\_SIZE, winning\_ticket);

**if** (index == -1)

cout << "I am sorry. You have lost. " << endl;

**else**

cout << "Congrats! You have won!!!"<<endl;

system("pause");

}