GTU CSE 241 / 501 Quiz

Std Code: 330

Std Number: | 2 | 1 | 0 | 1 | 0 | 4 | 0 | 0 | 4 | 0 | 5 | 6 | | |

```
bool search(int *arr, int key, int size){
        if(!arr || size == 0)
                return false;
        if(size == 1 && key != arr[0]){
                return false;
        }
        if(key == arr[0]){
                return true;
        }
        return search(&arr[1], key, size -1);
} // &arr[1] is actually *arr + sizeof(int) !!
```

```cpp
#include <vector>

vector<int> findMinMax(const vector<int> vec, int size, int min, int max, int index){
        // we assume min is MaxInt max is -MaxInt-1
        // index is 0 at the beginning

        if(index == size){
                vector<int> result(2);
                result[0] = min;
                result[1] = max;

                return result;
        }
        if(vec[index] < min)
                min = vec[index]
        if(vec[index] > max) //         we didnt write else if
                max = vec[index] // because in size=1 min =max
        return findMinMax(vec, size, min, max, index + 1);
}
```