// GradeReporter.h: header file

#pragma once

class GradeReporter

{

private:

int\* arr\_;

int size\_;

public:

// constructor

GradeReporter(int\* arr, int size);

// [] overload

int operator[] (const int k) const;

};

// GradeReporter.cpp: class implementation file

#include "GradeReporter.h"

// constructor

GradeReporter::GradeReporter(int\* arr, int size) {

arr\_ = arr;

size\_ = size;

}

// [] overload

int GradeReporter::operator[] (const int k) const {

int res = 0;

for (int i = 0; i < size\_; i++) {

if (arr\_[i] >= 10 \* k + 1 && arr\_[i] <= 10 \* k + 10) {

res++;

}

}

return res;

}

// main.cpp: main file, test class

#include "GradeReporter.h"

#include <iostream>

using namespace std;

int main() {

// Initialize grades int array

int arr[] = {55, 2, 2, 21, 4, 56, 23, 32, 12, 56, 76, 33, 44, 77, 88, 99, 100, 93, 71, 3};

int size = sizeof(arr) / sizeof(arr[0]);

// Test [] overload

GradeReporter reporter = GradeReporter(arr, size);

cout << "1-10: " << reporter[0] << endl;

cout << "51-60: " << reporter[5] << endl;

cout << "91-100: " << reporter[9] << endl;

return 0;

}