Hacettepe University
Department of Electrical and Electronics Engineering
ELE122 - Computers And Programming Laboratory

03.05.2021

Experiment 4

Q1) Create a (6 × 6) 2D array shown in the figure below and write a C program that moves this created 2D array **up/down/right/left** by using the keyboard numbers. An example output of the program is as follows:

```
0  0  0  0  0  0
0  0  0  0  0  0
0  0  1  1  0  0
0  0  1  1  0  0
0  0  0  0  0  0
0  0  0  0  0  0

Please, give a direction: 4

----------------
0  0  0  0  0  0
0  0  0  0  0  0
0  1  1  0  0  0
0  1  1  0  0  0
0  0  0  0  0  0
0  0  0  0  0  0
```

Q2) Assume that you are an engineer working on Moodle course system that is used in Hacettepe University's Evdekal system. You are expected to write a program that finds similarity percentages for two students' answers in a test exam with numerical answers.
You should write two functions with the following prototypes to get the data and calculate the results.

Prototypes:

```
void getNumbers(int * numbers1, int * numbers2, int * count);
void checkSimilarity(int * numbers1, int * numbers2, int * count);
```

Example result:

```
How many questions are there in the test? 6
Please enter the answer of First student for question 1: 12
Please enter the answer of First student for question 2: 84
Please enter the answer of First student for question 3: 68
Please enter the answer of First student for question 4: 20
Please enter the answer of First student for question 5: 34
Please enter the answer of First student for question 6: 10
Please enter the answer of Second student for question 1: 12
Please enter the answer of Second student for question 2: 65
Please enter the answer of Second student for question 3: 68
Please enter the answer of Second student for question 4: 20
Please enter the answer of Second student for question 5: 30
Please enter the answer of Second student for question 6: 10
Similarity between two students' answers is 67 percent.
```