PRETEST
Module 7 - Array I

Pretest Guidelines:

- **Pretest anwers must use the Digilab template provided**
- **Questions don't need to be retyped in the answers file**
- **Answers may be in English, atau Bahasa Indonesia**
- **PLAGIARISM IS ABSOLUTELY FORBIDDEN**
- **If needed, paraphrase and attach references from credible sources (Wikipedia, personal blogs, lab module theories, and Digilab's videos are not acceptable)**
- **Pretest answers must be submitted as a PDF file with the following filename format: PT_Daskom[ModuleNo]_[FullName]_[NPM].pdf**
- **Remember to submit before the deadline**

Questions

1. What is an array? In C, is string an array, why?
2. Describe the different parts of array declaration and initialization in C! Can you resize an array after declaring it?
3. See the array below:

   ```
   int numbers[10] = {1,2,3,4,5,6,7,8,9,10}
   ```

   What will be the output of `printf("%d\n", numbers[10])`? Why is that?

4. See the code below:

```
1 #include <stdio.h>
2
3 int main(void) {
4     char name[6];
5
6     printf("Name: ");
7     scanf("%s", name);
8
9     printf("Hello, %s!\n", name);
10
11    printf("Hello, ");
12    int i;
13    for (i = 0; i < 5; i++) {
14        printf("%c", name[i]);
15    }
16    printf("!\n");
17 }
```

   a) What are the differences in syntax between line 9 and line 11-16? Which one is better to use?

   b) Why does the for loop only iterate from 0 to 4 even though the array name has 6 elements? (hint: it has to do with how strings in C are terminated!)

   c) What happens when you input a name larger than the size of the name array?

5. Make a program that will accept n integer numbers from the user, where n is given by the user aswell. Store those integers in an appropriately sized array and output the average of those integer numbers to the console as a float. (Just copy-paste the code into Word).