

# Gebze Technical University

## Computer Engineering

CSE 331 - 2018 Fall

### ASSIGNMENT 1 REPORT

HALİL ONUR ÇEÇEN

161044057

#### Progress

In this assignment I completed following features successfully:

- Convert single non-recurred digits into text with respect of sentence beginning. (Capitalize first letter if it's the beginning of that sentence.)
- Not to convert floating point numbers (2.45, 12.3, 1.2, 12,34).
- Not to convert numbers bigger than 9. (More than 1-digit numbers).

I believe these features covers main goals for this assignment. I wanted to save the converted string to a file, but I couldn't manage to convert and save characters to memory character by character.

#### Description of the algorithm

I started the program by opening and reading string from the file. After that program goes to alter string procedure. This procedure prints the string according to requirements. To do that I created a loop to iterate over string and named it *stringIterator*. This iteration checks current character (starting from string address) if its number or not. If its number just prints it but if it's not, it sends that address to the new procedure called *checkIfConvert* which checks whether to print or convert to text. After that procedure we use *checkIfConvert*'s return value to print integers as they're without converting into text.

**CheckIfConvert:**

```
I = 0
While (nextChar is digit)
    i++
if (i is not 0)
    return i
if (currentChar is float)
    return i+1
if (currentChar is beginningOfSentence)
    CapitalFlag = true
convertDigit(digit, CapitalFlag)
```

ConvertDigit procedure checks coming digit and prints it's all characters one by one. If second argument is flagged capitalizes first letter of every digit.