

# Ceng198

## Introduction to Computer Programming

### Grading Lab#2

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#### **Sections 1 and 2.**

##### **“Guessing Game”**

Write a program in order to play the game “Game of Guessing”. Your program should generate a random number and the user should try to figure out that number. According to the users guess, the program should also direct the user, such as; if the user guesses a number less than the computers number the program should warn the user with a message as; “Too low, a little bit higher please”. And when the user finds the number the program should print the number of tries that the user did to find the number.

**Sample Run:** (Let’s say the computer generates a number: 55)

```
I have a number, try to guess it: 43
Too low, a little bit higher please: 70
Too high, a little bit lower please: 60
Too high, a little bit lower please: 50
Too low, a little bit higher please: 55
You found the number! Congratulations!
Number of tries = 5
```

**Hint:** To generate a random number include the libraries;

```
#include<stdlib.h> and #include<time.h>
```

And add the following code to your main program;

```
srand(time(0));
```

```
number = rand()%100 (generates a number between 0-99)
```

#### **Sections 3 and 4.**

One large chemical company pays its salespeople on a commission basis. The salespeople receive \$200 per week plus 8 percent (if he/she sold less than 2500\$ worth of

chemicals in a week) or 12 percent (if he/she sold more than 2500\$ worth of chemicals in a week) of their gross sales for that week.

For example, a salesperson who sells \$5000 worth of chemicals in a week receives \$200 plus 12 percent of \$5000, or a total of \$800.

Develop a complete C program that uses any of the repetitive structures to input each salesperson's gross sales for last week and calculate and display that salesperson's earnings.

**Sample Run:**

```
Enter sales in dollars (-1 to end): 5000
Salary is: $800.00
```