

COEN 10

Lab 5

Lab 5 – Multiplication Game

❖ You will create a multiplication game

❖ How it works

- ◆ The game gives two random numbers

- ◆ The user gives the multiplication

- ◆ The game checks the answer and output the result

- ◆ The game repeats for 10 times

- ◆ At the end the game shows the user the score in percentage.

Lab 5 – Multiplication Game

❖ You will C in Mac OS

◆ Use your Mac OS account

- The home directory
- You don't need to do this on the web server

◆ Edit the program using vi in the terminal

- The program needs to be a “.c” file

◆ Compile with gcc

`gcc name.c`

◆ Execute

`./a.out`

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❖ Write a main function

- ◆ Which executes 10 times
- ◆ Each time generates 2 numbers and shows to the user (printf)
- ◆ Reads the answer (scanf)
- ◆ Checks the result
- ◆ Counts the number of correct answers
- ◆ After 10 iterations, shows the user the score and returns

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❖ Functions

◆ `scanf ()`

◆ `printf ()`

◆ `rand ()`

- returns a big number
- to generate a number between 0 and 12

`number = rand () % 13;`

◆ to seed the random function → `srand ()`

- Use the time as a seed to make it more random

`srand ((int) time (NULL));`

Lab 5 – Multiplication Game

❖ When you are done

◆ Demo

- Play the game on the terminal to the TA

◆ Submit

- Upload the source code to Camino
- Don't forget to put the following info on the top of the code:
 - Name
 - Lab section
 - Lab #