Intro to Programming
COEN 10

Lab 5

Multiplication Game in C

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 use C in the 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

Lab 5 – Multiplication Game

- 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.

Lab 5 – Multiplication Game

- 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 #