# King Fahd University of Petroleum and Minerals COLLEGE OF COMPUTER SCIENCE AND ENGINEERING COMPUTER ENGINEERING DEPARTMEENT 

## COE 205 - Term 061 <br> Programming Assignment 2

Write a program in assembly language that reads a number with a single digit as input and displays its multiplication table (multiplied by 1 to 9 ).
Follow the following guidelines.

1. Reading the number
a. Display message asking the user to enter the number
b. User enters the number.
2. Generate the multiplication table in an internally reserved array of 9 elements
3. Display of the result:
a. Convert every result using the way done in programming assignment 1
b. Convert the decimal digits into ASCII numbers
c. Output the result as: (supposing that input number was 8 )

$$
\begin{aligned}
& 8 \times 1=8 \\
& 8 \times 2=16 \\
& 8 \times 3=24 \\
& 8 \times 4=32 \\
& \ldots . \\
& 8 \times 9=72
\end{aligned}
$$

- All submissions are by email.
- Send your email with the following subject: COE 205 PRG ASSGNT. Subject is in uppercase letters (as shown here).
- In the body of the email, write your name and ID number.
- Also, write your name and ID number in the source code as well.
- Send your program source code only. DO NOT SEND the EXECUTABLES
- Your filename should be prg2_XX.asm; XX corresponding to your order in the roster list. Example: a student who is number 5 will send: prg2_05.asm
- Put your explanations in your source code file as comments.
- Grading Policy:

Program does not assemble: 10 points
Program assembles but does not do anything meaningful: 25 points
Program assembles but does work with significant problems: 50 points
Program assembles but does work with medium problems: 60 points
Program assembles but does work with minor problems: 75 points
Program assembles and works perfectly: 85 points
Comments: Between 15 to 25 points extra if well commented.
NO Comments:
20 points penalty

