

Time 20 minutes, Marks 10

## **Submission guide:**

- 1. Write your code in EMU8086
- 2. Rename the file as following Quiz\_5-your id number (replace your id number with your nsu id)
- 3. Submit both **asm** file and a **screenshot** of whole screen.
- 4. Don't write anything in this pdf.

## Question

We are trying to find a special type of natural number. Consider the type is "X". X number is a natural number greater than 1 that is not a product of two smaller natural numbers. A natural number greater than 1 that is not X is called a X` number. For example, 5 is X type of number because the only ways of writing it as a product,  $1 \times 5$  or  $5 \times 1$ , involve 5 itself. However, 4 is X` because it is a product  $(2 \times 2)$  in which both numbers are smaller than 4. Now, write a program in assembly language that takes an input and check whether the number is X type or not. Your output should look like this-

Enter an integer less than 9: 6

The number is : X`