STRING FUNCTIONS TEST:

1. a) Determine the output for the following program.

   ```
   String SchoolName;
   SchoolName = "St. Jean de Brebeuf Secondary School";
   SchoolName.Length
   SchoolName.Substring(3,5);
   SchoolName.IndexOf('J');
   ```

b) Provide the string function statement that will extract the string "be" from SchoolName.
2. UPC’s (Universal Product Codes) are found on almost all things that we buy. Two examples of typical UPC’s are shown below. For a bar code to be valid the following relationship must be true.

\[ C = 3 \times (\text{sum of the digits in even positions}) + (\text{sum of the digits in odd positions}) \text{ must be evenly divisible by 10} \]

Note: The first digit is considered to be in position zero, an even position.

For the first UPC the calculation would look like this:

\[ C = 3(0+5+6+1+0+0) + (6+9+1+0+6+2) = 3(12) + 24 = 60 \text{ which is evenly divisible by 10} \text{- so it’s valid!} \]

Write a program which will input a UPC and determine whether it is valid or not.