COSC 1020 - Lab 4

Please refer to the code written in page 557 of your textbook. Type that code and see if that runs perfectly or not. Modify this code to do the following:

• Ask the user to enter the base of the number. For example:
  ▪  base 2 numbers consist of 0 and 1 (ex. 010100011)
  ▪  base 16 numbers consist of 0 - 9, A,B,C,D,E,F (ex. FED54)
• You can use `useRadix()` method of java to take input of the base. It is a method of Scanner class.
• Then ask the user to enter the input for the number itself.
• If the user enters number in a different base than the mentioned one then throw exception and show a message. Ask the user to enter the number again until the user enters number in correct base.
• When user enters number in correct base, display a message and print the number.

A sample run can be as follow: (here system prompt is shown as bold text, user input as normal text, and program output as italic text.)

```java
Please enter the base of the number:
2
Please enter the number:
55
....Number not in correct base !!
Please enter the number:
FEF34
....Number not in correct base !!
Please enter the number:
011011
 011011 .... Number is in correct base
```