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Python Exercise
Curriculum Development

Directions: Look at the given code in the sections given below on the right. Find all the syntax errors in the codes given and explain why there are errors. Give your explanations of the error you detected on the right.

Code	Syntax error detected explanation
Find potential sources of runtime errors in this code snippet: *for x in range(a, b):* *print("(%f, %f, %f)" % my_list[x])*	
Find potential sources of runtime errors in this code snippet: *dividend = float(input("Please enter the dividend: "))* *divisor = float(input("Please enter the divisor: "))* *quotient = dividend / divisor* *quotient_rounded = math.round(quotient)*	
Find potential sources of runtime errors in this code snippet: *for x in range(a, b):* *print("(%f, %f, %f)" % my_list[x])*	
Find potential sources of logic errors in this code snippet: *product = 0* *for i in range(10):* *product *= i* *sum_squares = 0* *for i in range(10):* *i_sq = i**2* *sum_squares += i_sq* *nums = 0* *for num in range(10):* *num += num*	

Lesson Description: This assignment would be given to students to help them develop their skills in python and detecting syntactical errors. The students would read the code descriptions given on the left and then detect the errors given with an explanation of why that line of code would not work.

Exercise:

Do this exercise:

> 1\. Make a program that asks the number between 1 and 10\.
> If the number is out of range the program should display "invalid number".

Description: If Statements Explained to students

A program sometimes may have to make choices. These choices can execute different code depending on certain condition. In Python the **if statement** is used for conditional execution or branching. An if statement is one of the **control structures**. (*A control structure controls the flow of the program.*)
The if statement may be combined with certain operator such as equality (==), greater than (>=), smaller than (<=) and not equal (!=). Conditions may be combined using the keywords **or** and **and**.
The exercise would help in understanding the use of conditional statements for If- Else and Elif statements.