CSE 160 Spring 2025 Quiz 1 Practice Key

1. Given the following table with expressions on the left side, state what it evaluates to and the data type of the expression. If the expression causes an error, write `error` in that box instead.

Expression	Evaluation	Data Type
`3 * 2**3 - 8 / 2`	`20.0`	Float

`lst = ["I love", "cse"]`
`lst.append(160)`
`lst  # what does lst evaluate to?`
	`["I love", "cse", 160]`	List

`True and False`	`False`	Boolean
`len("cse 160!") // 2`	`4`	Integer

2.
(a) You are given a person's age as an int, stored in variable `age`, and whether they have a license as a boolean, stored in variable `license`. Assume that these variables have already been declared with values.

Determine whether or not the person can drive and print the results. If the person is younger than 16, print `"They are too young to drive!"`. If they are 16 or older and they have a license, print `"They can drive!"`. If they are 16 or older but they do not have a license, print `"They are old enough to drive, but need a license"`.

For example, given `age = 16` and `license = False` your code should print out `"They are old enough to drive, but need a license"`.

```
if age < 16:
      print("They are too young to drive!")
else:
      if license:
            print("They can drive!")
      else:
            print("They are old enough to drive, but need a license")
```

3. What does the following code output?

```
for i in range(1, 6, 2):
      row = ""
      for j in range(i):
            row = row + "*"
      print(row)
```

```
*
***
*****
```

4. Suppose you have the following list

```
lst1 = ["apple", "banana", "kiwi", "blueberry"]
```

(a) What is the output of the following code:

```
count = 0
for i in range(len(lst1[0])):
      count += i
print(count)
```

```
10
```

Suppose you now create a second list, based on the first:

```
lst2 = []
for item in lst1:
   lst2.append(item)
lst2[1] = "lemon"
lst2.append("orange")
```

(b) What are the contents of `lst2`?

```
['apple', 'lemon', 'kiwi', 'blueberry', 'orange']
```

(c) What is the output of the following code:

```
for item in lst2:
      if (len(item) <= 5):
            print(item)
```

```
apple
lemon
kiwi
```

(d) What is the output of the following code:

```
for i in range(len(lst1[2]), len(lst2[4])):
      print("Yummy fruit!")
```

```
Yummy fruit!
Yummy fruit!
```