Practice Exercises_ Week 2

1.What is the output of the following code?

```
value=100
value="StudyHard"
print("value=",value)
```

Your answer: _____

2. What is the output of the code when it gets executed?

```
name="XiaoboBi"
print(name+666)
```

A. XiaoboBi666
B. XiaoboBi
C. 666
D. TypeError: can only concatenate str (not "int") to str

Your answer: _____

3.

```
str1="I like " # there is a space after "I like"
str2="Python!"
print(str1+str2)
```

The output of the above program is_____

4. Which of the following Python variables are valid?
A. and = 123.45 B. num-2 = "Abc" + "23" C. flag$ = True D. Str_1=False

Your answer_____

5. What is the output of the following code?

```
str1="It take him"
num1=3
num2=57
str2="minutes"
print(str1,num1,"hours",num2,str2,"to run the marathon")
```

The output is_____

6. Analyse the following code

```
s = input("Give a string:")
vCount = 0
vCount += s.count("a")
vCount += s.count("e")
vCount += s.count("i")
vCount += s.count("o")
vCount += s.count("u")
print (vCount)
What the above program does?
```

---

7. .

```
1 text_1 = "This text has a line change.\n"
2 text_1=repr(text_1)
3 text_2="end of line."
4 print(text_1)
5 print(text_2)
```

What is the output of the above program?

8.

```
1 number1 = 3.5
2 number2 = 4.123123
3 number3 = 1234.1231513
4 number1 = round(number1)
5 number2 = round(number2,2)
6 number3 = round(number3,4)
7 print(number1,'\n',number2,'\n', number3)
```

What round() function does in the above program?

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9. Analyse the code:

```
1 val_1=int(input("please input 1st num:"))
2 val_2=int(input("please input 2nd num:"))
3 print(val_1+val_2)
```

What error will be thrown if the above code gets executed?

10. Analyse the code

```
str="ArtificialIntelligence"
print("the length of str is:",len(str))
```

The output of the code is:_____

11. Execute the code:

```
str="AaBbCc99"
print(str.lower())
print(str.upper())
print(str.isalpha())
print(str.isalnum())
print(str.isdigit())
str2="123"
print(str2.isdigit())
str3=("Abc")
print(str3.isalpha())
```

II. Coding exercises

1. Write a program that accepts two integer numbers as input from the user then calculate the sum and average of those numbers and print the results.

2. Write a program that prompts the user to enter the minutes (e.g., 1 billion) and displays the number of years and days for the minutes. For simplicity, assume a year has 365 days. Here is a sample run:

   Enter the number of minutes: 1000000000
   1000000000 minutes is approximately **1902 years and 214 days**.

3. Write a program that prompts the user to enter a two-word string (i.e., a string with two words separated with a space), and outputs the second word of the string. Example run here.

   Enter a two-word sentence: LUT University
   The second word is University

   Hint: find() function may be helpful.

4. Write a program that prompts the user to enter two strings as input. The program then replaces all the occurrences of second string from the first string, surrounded by double quotes. Example run here:

Example input:
Enter the first string: To be or not to be
Enter the string that to be double quoted: e
Output:
To b"e" or not to b"e"