

Shaneel Ali, Chase Darlington, Sydney Guerra, Nathan Sandoval

Please answer the following questions as a group. Write the group members names on the first page. Name the file as (GroupID_Assignment1_BUS205_01). You can provide the answers below each question. If the answers are codes, please write them on your coding software then copy and paste them. You can also submit a py file if you choose to do so.

Q1) About 12% of the restaurants in the United States are pizzerias, and there are about 70,000 pizzerias in the United States. Estimate the total number of restaurants in the United States.

$70,000 \times .12 =$

8,400 pizzerias

Q2)

	A	B	C
A = 3	3	Does not exist	Does not exist
B = 4	3	4	Does not exist
C = float(A + B)	3	4	7
Print(A + B - C)	3	4	7
C *= 4	3	4	28
J = 3	3	4	28

Q3) The population of the United States was about 281 million in 2000 and is predicted to be about 404 million in 2050. Write a code to approximate the percentage population growth in the United States during the first half of the 21st century. Round the percentage to the nearest whole number.

```
populationofUSin2000 = (281)
populationofUSin2050 = (404)
percentageGrowth = ((populationofUSin2050 -
populationofUSin2000)/populationofUSin2000*100)
print(percentageGrowth)
print(int(round(percentageGrowth)))
```

44%

Q4) Write a code that asks the user for an input, then lops off the last character of a string.

```
str1=input('type here: ')
print(str1[:len(str1)-1])
```

Q5) Identify all errors in the following codes:

a) `phoneNumber = 231-5678`

`print("My phone number is:" + phoneNumber)`

Semantic error; generated by '-'. The computer interprets phoneNumber as an integer, and '-' as a mathematical operator, producing the solution, '-5447'

b) `quote = 'I came to Cassablanca for the waters'`

`print(quote + ':' + "Bogart")`

Syntax error: lack of punctuation, "

c) `age = input('Enter your age:')`

`print("Next year you will be" + (age + 1))`

Type error: the function '+' is applied to inappropriate type of input. Input will be interpreted as a string, and no mathematical operator will work with the string. The age input should be an integer → `int(input('enter your age:'))`

Q6) Write a program that requests a company's earnings-per-share for the year and the price of one share of stocks as input, and then displays the company's price-to-earnings ratio (that is, price / earnings). Example the box below

Enter earnings per share: 5.25

Enter price per share: 68.25

Price-to-Earnings ratio: 13.0

`eps = eval(input('Enter earnings per share: '))`

`print('Earnings per share: ' + str(eps))`

`p=eval(input('Enter price per share: '))`

`print('Price per share: ' + str(p))`

`peRatio=p/eps`

`print('Price-to-Earnings ratio: ' + str(peRatio))`

Q7) Write a program that requests a positive number containing a decimal point as input then displays the number of digits to the left of the decimal point and the number of digits to the right of the decimal point. Example the box below

Enter number: 123.456

3 digits to left of decimal point.

3 digits to right of decimal point

`number=input("Enter number:")`

`decimalPoint = number.find('.')`

`print(decimalPoint, "digits to the left of decimal point")`

`print(len(number)-decimalPoint-1,"digits to right of decimal point")`

```
Q8) L = ["sentence", "contains", "five", "words."]
L.insert(0, "this")
Print(" ". Join(L))
del L[3]
L.insert(3, "six")
L.insert(4, "Different")
print (" ". Join(L))
```

display the output of the code above

this sentence contains five words.

this sentence contains six Different words.

Q9) write a program that counts the number of words in a sentence input by the user. See example in the box below

INPUT

```
p= ("This program counts the number of words in a sentence.")
words= p.split()
wordCount= len(words)
print("Enter a sentence:",p)
print("Number of words is:", wordCount)
```

OUTPUT

```
Enter a sentence: This program counts the number of words in a sentence.
Number of words is: 10
```