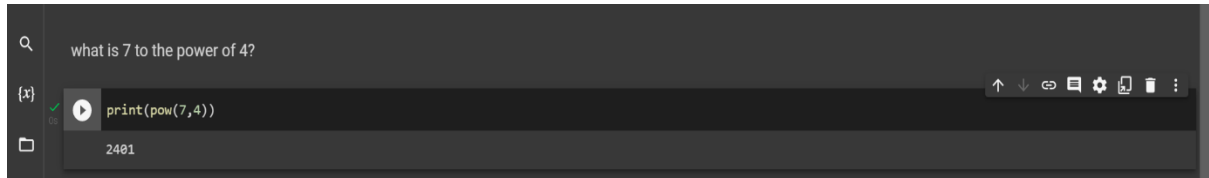


ASSIGNMENT 3

QUESTION 1



```
what is 7 to the power of 4?
```

```
print(pow(7,4))
```

```
2401
```

QUESTION 2



```
split this string s="Hi there Sam!"
```

```
s="Hi there Sam!"  
print(s.split())
```

```
['Hi', 'there', 'Sam!']
```

QUESTION 3



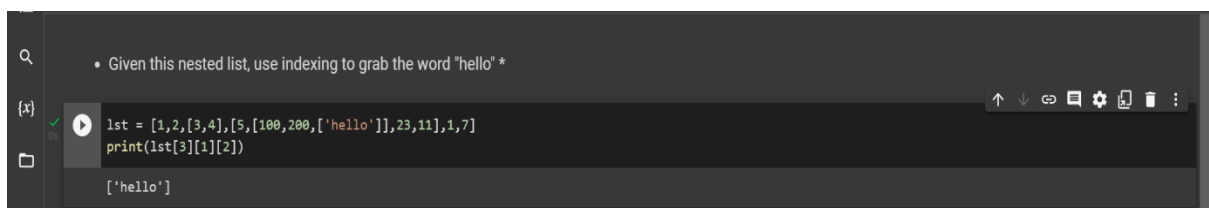
```
Given the variables:
```

```
planet = Earth  
diameter = 12742
```

```
planet = "Earth"  
diameter = 12742  
print('The diameter of {} is {} kilometers '.format(planet,diameter))
```

```
The diameter of Earth is 12742 kilometers
```

QUESTION 4



```
Given this nested list, use indexing to grab the word "hello" *
```

```
lst = [1,2,[3,4],[5,[100,200,['hello']],23,11],1,7]  
print(lst[3][1][2])
```

```
['hello']
```

QUESTION 5



```
Given this nest dictionary grab the word "hello". Be prepared, this will be annoying tricky *
```

```
d = {'k1':[1,2,3,{ 'tricky':['oh','man','inception',{'target':[1,2,3,'hello']}]}]}  
print(d['k1'][3]['tricky'][3]['target'][3])
```

```
hello
```

QUESTION 6

```
Q • What is the main difference between a tuple and a list? *
```

```
(x) [13] #tuple are immutable but list are mutable
      #tuples are denoted as () and list are denoted as []
```

QUESTION 7

```
Q • Create a function that grabs the email website domain from a string in the form: *
  • So for example, passing "user@domain.com" would return: domain.com*
```

```
(x) [14] def domainGet(email):
      print("Your doain is :"+email.split('@')[-1])
      email = input("please enter your email: >")

      please enter your email: >user@domain.com

      [15] domainGet('user@domain.com')

      Your doain is :domain.com
```

QUESTION 8

```
Q • Create a basic function that returns True if the word 'dog' is contained in the input string. Don't worry about edge cases like a punctuation
  being attached to the word dog, but do account for capitalization. *
```

```
(x) [16] def findDog(st):
      if 'dog' in st.lower():
          print("True")
      else:
          print("False")
      st = "Is there a dog here?"
      findDog(st)

      True

      [17] findDog('Is there a dog here?')

      True
```

QUESTION 9

```
Q • Create a function that counts the number of times the word "dog" occurs in a string. Again ignore edge cases. *
```

```
(x) [18] value = 'This dog runs faster than the other dog double!';
      def countdogs(value):
          count = 0
          for word in value.lower().split():
              if word == 'dog' or word == 'dogs':
                  count = count + 1
                  print(count)
          countdogs(value)

      1
      2
```

QUESTION 10

You are driving a little too fast, and a police officer stops you. Write a function, to return one of 3 possible results: "No ticket", "Small ticket", or "Big Ticket". If your speed is 60 or less, the result is "No Ticket". If speed is between 61 and 80 inclusive, the result is "Small Ticket". If speed is 81 or more, the result is "Big Ticket". Unless it is your birthday (encoded as a boolean value in the parameters of the function) – on your birthday, your speed can be 5 higher in all cases. *

```
def caught_speeding(speed,is_birthday):
    if is_birthday:
        speeding = speed - 5
    else:
        speeding = speed
    if speeding > 80:
        return 'Big Ticket'
    elif speeding > 60:
        return 'Small Ticket'
    else:
        return 'No Ticket'
print(caught_speeding(90,False))
```

Big Ticket

QUESTION 11

"Create an employee list with basic salary values(at least 5 values for 5 employees) and using a for loop retrieve each employee salary and calculate total salary expenditure. "

```
employee = [400,500,550,600,250]
sum = 0
print("Salary of 1st person is",employee[0])
print("Salary of 2nd person is",employee[1])
print("Salary of 3rd person is",employee[2])
print("Salary of 4th person is",employee[3])
print("Salary of 5th person is",employee[4])
for x in employee:
    sum = sum+x
print("The total salary is",sum)
```

Salary of 1st person is 400
Salary of 2nd person is 500
Salary of 3rd person is 550
Salary of 4th person is 600
Salary of 5th person is 250
The total salary is 2300

QUESTION 12

"Create two dictionaries in Python: First one to contain fields as Empid, Empname, Basicpay. Second dictionary to contain fields as DeptName, DeptId.Combine both dictionaries. "

```
d1={'Empid':1, 'Empname': 'abc','Basicpay':10000}
d2={'DeptName':'cse','DeptId':2}
print(**d1,**d2)
```

{'Empid': 1, 'Empname': 'abc', 'Basicpay': 10000, 'DeptName': 'cse', 'DeptId': 2}