Python and Flask Questions:

1. What is an interpreted language?

Python is an interpreted language meaning that it doesn’t need a compiler for the code that is written by you for the computer to understand, everything is turned into machine language underneath the hood. An example would be to run the code you can simply run it in one step, instead of compiling it and then run it.

1. What is the outcome of printing name[0] for the following string – name = “alice”  
     
   a
2. Print the second character of the second list item. List = [“list1”, “list2”, “list3”]  
     
   print(list[1][1])
3. What are immutable and mutable sequences?  
     
   Immutable sequences are sequences of data stores back to back in memory that cannot be indexed into and changed. To change an immutable sequence, you must allocate more memory and rewrite the set with the changes you want into a new memory address.
4. How would you create a set of data type or add to it? What is the advantage of a set?  
     
   fruits = set()  
   fruits.add(“apple”)  
   fruits.add(“papaya”)  
     
   The advantage of a set is it’s quick access and ability to discard duplicated items. They’re unordered as well. To check if orange is IN fruits
5. Create a dictionary with key value pairs for Name and age for 3 people.

Peeps = {“bob”: 20, “sam”: 30, “toby”:40}

1. What is the new and old way for formatted strings in Python post and prior 3.6?  
     
   print(“{} square is {}”.format(I, square(i)))

Print(f”{name} is 12 years old”, name)

1. What is the purpose of if \_\_name\_\_ == “\_\_main\_\_”:?

To run the code only when this specific program if the file itself is being run, not being imported

1. Create a python class called books with isbn, title, author as well as assignment.

Class Books:  
 def \_\_innit\_\_(self, isbn, title, author):  
 self.isbn = isbn

Self.title = title  
 self.author = author  
  
book1 = books(q213, hello, bob Davidson)  
  
print (book1.isbn)

1. What is the syntax for flask to accept custom strings in the route?  
     
   route(“/<string:name>”)  
    return f”hello, {name}!”
2. Write a program that uses flask and jinja to show if today is your own birthday   
   import date time now  
   if today.day = your birthday and today.moth = your birth month  
    birthday = true

Return render\_template(“whatever.html”, birthday = birthday)  
  
{% if birthday %}  
 do some thing  
{% else %}  
 nah  
{% endif %}

1. What is the convention to pass in arguments into a rendered template?   
   name = name
2. Write a loop in Jinja that loops over a list.  
     
   {% for name in names %}  
    <li> {{ name }}</li>  
   {% endfor %}
3. What is the reference syntax for one route to link to another route in jinja?  
     
   a href {{ url\_for(‘index’) }}
4. What is the placeholder syntax in jinja?

{{ }}

1. What is the inheritance syntax in jinja?

{% extend “layout.html” %}

1. What is the purpose of app.config[“SESSION\_TYPE”] = “filesystem”  
   Saving data server side
2. How can you use session using if statements to ensure each session is unique?   
   if previous session notes is none, make new notes. Session[“notes”] = []