**Lab 4 – Programming Sequential and Decision   
Structures in Python**

**(100 points)**

**Part I:**

For each of the four problems in Assignment 4, convert the algorithm that you have developed into Python code.

Don’t forget to watch these videos before you write your code:  
<https://connect.asu.edu/p316dv27hkh/>

<https://connect.asu.edu/p7b0mppsxwv/>

**Part II:**

**P5. (20 points)**

Write a Python function for computing an employee’s pay based on the following description.

The employee’s weekly pay is based on her category, which is either:

Category 1: Salary  
OR  
Category 2: Hourly

For the hourly category, there are two subcategories, regular hours & overtime:

* Regular hours are 40, and they have their own rate.
* Overtime hours have an overtime rate.

Write a function that takes as input the category, which can only be “salary” or “hourly”, and the number of worked hours, and it prints out the employee pay. Use these variables inside your function:

hourlyRate = 15

overtimeRate= 20

salaryRate = 500

Test your code using these two cases:

Case 1:

category = “salary”

Case2:

category = “hourly” and hours = 44

That is, run case 1, by setting category = “salary” and get a print of the ‘pay’, then run case 2 and get a print of the ‘pay’.

Solution Hint: For case 1, you will simply output the salary rate given above. For case 2, you will consider the hourly rate for the first 40 hours, and then you will consider the overtime rate for the remaining 4 hours.

**Lab Deliverables:**  
For each problem, submit a screen shot of your code and your obtained output.