

## cis122 Project 1

Work using the Jupyter Notebook.

Name your notebook **Project1**.

**15 points total**

### Part a) Hello World

1 point

Print "Hello World!"

### Part b) Create some variables, then print their values using several print statements.

3 points

Create several variables using meaningful names and any data (real or not) you want to use for them.

- A nice vacation area
- The price of a very large cup of espresso coffee
- The number of languages you speak

### Part c) Create 2 variables, then print those variables several times using a "for" loop.

5 points

Create a variable for a country you want to visit.

Create a variable for a season such as summer or winter

Repeat 6 times:

print something like "I want to visit xxxxx" (where xxxxx is the country to visit)  
on the next line print "in the ssss" (where ssss is the season or month to visit)  
finally print a blank line

Use only 3 print statements, not 18.

Finally, print "Done!" once after the repeated stuff ends

1 point - create 2 variables with values

3 points - a for statement that will repeat 6 times.

2 points for the **for** statement

1 points for the indented body

1 point - one point for the printing "Done" once only after the repeats end.

### Part d) Create 2 variables, one for a budget value, one for an item's price, compare with "if"

6 points

Print both the price and the budget amount

if the price is more than the budget amount,

print a message saying that the price is more than the budget

else

print a message saying that the price is within the budget

1 point create variables with number values

5 point if statement to compare budget to price

2 points for the **if** statement

1 point for the indented body

1 point for the else

1 point for the indented body

### **Challenge problem**

#### **2 bonus points**

Extend the budget vs price problem in part d).

When the price is within budget, calculate a new budget amount that takes into account how much is left after paying the price.

When the price exceeds the budget amount, calculate and display how large a loan would be needed to afford the price.

**GTF challenge** Your GTF may offer a 1 or 2 point challenge.