

NAME: _____

CS21 Quiz 2, Swarthmore College, Fall 2015

1. For each of the following expressions, show the value that will be returned by the Python interpreter and give the type of the resulting value. Note: if the operation is not allowed in Python, write INVALID on that line.

Assume that the following variable assignments have already been made:

```
value = 40
word = "inauguration"
names = ["molly", "tex", "ada", "oberon"]
```

VALUE

TYPE

range(10, value, 10)

value < 35

50/value == 40/value

word[2:7]

"augur" in word

names[1]*3

len(names)

2. Trace the following program and show its output:

```
x = 5
y = "goats"
z = ""
for i in range(5):
    if x > i:
        x = x - 1
    else:
        x = x + 1
    z = z + y[x]
print(z)
```

3. Write a program that asks the user to enter some text and creates a new string where every 3rd character has been replaced by a dash. Print out this new string. One example run is shown below.

```
$ python dasher.py
Enter your phrase: pumpkin spice latte
pu-pk-n -pi-e -at-e
```

4. Write a program that helps people figure out when the last train leaves 30th Street Station for Swarthmore. Ask the user to type in a day of the week and your program should print the time that the train leaves. For simplicity, assume that the user always inputs a valid day of the week in all lowercase case letters. For reference, here are the train times:

```
saturday and sunday: last train leaves 30th Street at 11:12pm
all other days: last train leaves 30th Street at 12:09am
```

```
$ python septa.py
Enter a day of the week: wednesday
The last train leaves at 12:09am
```

```
$ python septa.py
Enter a day of the week: sunday
The last train leaves at 11:12pm
```