SCORE: (out of 40)

CS 8 – Introduction to Computer Science
HOMEWORK 7
Print this form and write your answers on it.

Submit this homework (hardcopy) to class. DUE DATE is 06/01/17.

Name: _____

Umail: _____@umail.ucsb.edu

Lab Time Circle one: 3 PM 4 PM 5 PM 6 PM

1. (22 pts) Below is a transcript of a shell session in Python. Fill in what would be printed by the shell after each set of statements. [Hint: TRY each one in Python.]

a. (2 pts)

```
>>> myDict = {"Mei":95,"Bob":85,"Jose":93,"Diana":100}
>>> myDict["Jose"]
```

b. (4 pts) You MUST try this one to know the answer! [Think about why.]

```
>>> for item in myDict:
... print(item)
```

c. (4 pts)

```
>>> myDict["Raj"] = 87
>>> names = list(myDict.keys())
>>> names.sort()
>>> names
```

d. (4 pts)

```
>>> for name in names:
... print(myDict[name])
```

e. (4 pts)

```
>>> for name in names:
... print(name,": ",myDict[name])
```

f. (4 pts)

>>> for name in sorted(myDict): ... print(name,": ",myDict[name])

2. (8 pts) Write a function named **`printSorted`** that takes a dictionary as its only parameter, and it prints out the key/value pairs in order by key.

3 (10 pts). Examine the following Python source code that uses a while loop:

```
i = 100
while (i < 499):
     print(i)
     i = i + 100
```

a. (2 pts) How many times will this loop execute?

b. (2 pts) What is the value of **i** after the loop is done executing?

c. (6 pts) Rewrite the code to use a for loop instead. Be sure the printed results will exactly match the results printed by the while loop above.