1. For each of the following expressions, show the value that will be returned by the Python interpreter. Assume that you already have \texttt{text = "swarthmore college"} and you have imported the string library using \texttt{from string import *}.

(a) \texttt{split(text)}
(b) \texttt{upper(text)}
(c) \texttt{text[1:5]}
(d) \texttt{"4" + text[11:20] + "5"}

2. What is the output of the following program?

```python
def main():
    word = "boz"
    result = ""
    for letter in word:
        result = result + chr(ord(letter) - 1)
    print result
```

3. Consider the program below which is intended to determine whether a given number is negative, zero, or positive.

```python
def testNumber():
    n=input("Enter a number: ")
    if n < 0:
        print "negative"
    if n > 0:
        print "positive"
    else:
        print "zero"
```

(a) What will be printed if the user enters 5 at the prompt?
(b) What will be printed if the user enters -5 at the prompt?
(c) What will be printed if the user enters 0 at the prompt?
(d) Does the program give the desired result?
   If not, write a corrected version below.
4. A person is eligible to be a US senator if he or she is at least 30 years old and has been a citizen for at least 9 years. Write a program that takes a person’s age and years of citizenship as input and returns their eligibility for the Senate. For example:

```python
>>> main()
Enter your age >> 30
Enter years US citizen >> 5
Eligibility for the Senate:
You have not been a US citizen long enough.

>>> main()
Enter your age >> 30
Enter years US citizen >> 10
Eligibility for the Senate:
You are eligible!

>>> main()
Enter your age >> 29
Enter years US citizen >> 10
Eligibility for the Senate:
You are too young.
```

5. Finish the code for the program below so that it produces the following pattern of stars of some size, n, entered by the user (in this example, n is 4):

```
* * * *
 * * *
  * *
   *
```

```python
def main() :
    print "This program prints out a pattern of stars"
    n = input("Enter a value for the size of the pattern: ")