15-112 Fall 2017 Quiz 3

Up to 15 minutes. No calculators, no notes, no books, no computers. Show your work!
No lists or recursion are allowed.

1. (35 points) **Code Tracing**: Indicate what the following program prints. Place your answer (and nothing else) in the box below the code.

```python
def ct1(s):
    t = ""
    r = 0
    for c in s:
        if c.isdigit() and int(c)%2 == 0:
            t += c
        elif c.isalpha():
            r += 3
        elif c.isalnum():
            r += 1
        elif c.isspace():
            t = "%s%d"%(t,r)
            r = 0
        else:
            print("0", end="")
    return (t)

print(ct1("B32$ 85!e "))
```

2. (20 points) **Reasoning Over Code**: Find an argument (the value of s) for `rc1` that makes it return True. Place your answer (and nothing else) in the box below the code. Assume that the function `isPrime` exists and functions as presented earlier in the course.

```python
def func(s):
    a = 0
    for c in s:
        a += (ord(c) - ord('c'))
    return a // len(s)

def rc1(s):
    a = func(s)
    b = func(s[::-2])
    return isPrime(a) and isPrime(b) and a != b and len(s) == 6
```
3. (45 points) **Free Response**: Write the function `stripSideNotes(s)` that returns a copy of `s` with all text removed that is between parentheses.

   For example:
   
   `stripSideNotes("John(the doctor) went to the store(Walmart)")` returns "John went to the store"

   You may assume the string will contain balanced parentheses. You may also assume that parentheses will not be nested.