

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.

```
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.

```
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
```

QUIZ CONTINUES ON THE BACK OF THE PAGE.

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.