Exam 1

1) Determine what each of the following Python expressions will return. In other words, if these expressions were entered into the Python terminal, what would they return? (5 points each)

a.

```
5/2
```

```
Returns 2
```

b.

```
5./2.
```

```
Returns 2.5
```

c.

```
5%3
```

```
Returns 2
```

d.

```
not(5>6) and (True or False)
```

```
True
```

e.

```
(5==4) or (not True)
```

False

2) Write the output of the following programs. (8 points each)

a.

```
for i in range(3):
        print i*i
print "hi"
```

```
0
1
4
hi
```

b.

```
s=0
for x in [5,3,1]:
        s=s+x
print s
```

```
9
```

c.

```
x=16
while x  > 5:
        x=x/2
print x
```

```
4
```

d.

```
a=7
if a%2==1:
        print "yoda"
else:
        print "do yoga"


        yoda
```

3) The following questions are about Git. (10 points each)

a. Explain how to create a new git repository. Include all terminal commands and things you must do on github. Assume your github user name is "Charlie" and your project is in a folder named "Project" in your Documents folder. Name the repository "ProjRepo".

git add . git commit -m "Change" git remote add origin https//github.com/Charlie/project.git git push origin -v master

b. Explain how to clone a repository name "Awesome" from github user named "Barry22". Clone the repository into your Documents folder.

git clone https://github.com/barry22/awesome

4) Write a program that constructs an array filled with all of the prime numbers between 2 and 100. (20 points)

for a=[] in range (2,100):

prime = ture

for x in range(2,i):

if i/x==0:

prime = false

if prime:

a=a+[i]