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
```

```
= 2
```

b.

```
5./2.
```

```
= 2.5
```

c.

```
5%3
```

```
= 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".

- Go to Documents in your computer.

- Make a new folder.

- Name it "Project"

How to create a new repository:

- Log in to GitHub.

- Create a new repository.

- Name it "ProjRepo"

How to upload to GitHub:

- Open Terminal.

- Type "cd Documents"

- Type "cd Project"

- Type "git init"

- Type "git add ."

- Type "git commit -m "first commit" "

- Type "git remote add origin https://github.com/Charlie/ProjRepo.git"

- Type "git push origin master"

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

- Type "cd Documents"

- Type "cd Project"

- Tyep "git clone https://github.com/Barry22/Awesome.git"

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

for num in range(1,201):

        if all(num(percent sign)5i!=0 for i in range(2,num)): print num