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"
```

>>>>1,4,9 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
```

```python
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 config –global user.name "charlie" ¿¿¿¿ git config –global user.email ¿¿¿¿

git init ¿¿¿¿ git add . ¿¿¿¿ git remote add origin https://github.com/charlie/project.git ¿¿¿¿ git push add origin master

    b. Explain how to clone a repository name "Awesome" from github user named "Barry22". Clone the repository into your Documents folder. cd Documents/ git clone https://github.com/Barry22.git

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

¿¿¿¿a[] for i in range(2,100): prime=True for x in range(2,i): if i

prime=False if prime: a=a+[i]