$\mathbf{Exam}\ \mathbf{1}$

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:

else:

print "yoda"

```
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