Question1:

#use scp to upload twain.txt

scp -i 43372910.pem twain.txt [ubuntu@ec2-54-206-122-41.ap-southeast-2.compute.amazonaws.com](mailto:ubuntu@ec2-54-206-122-41.ap-southeast-2.compute.amazonaws.com):

#make the file to be executable and check whether it can be executed successfully.

chmod u+x twain.txt

ls -l twain.txt

# convert all instances of the string ‘Huck’ to ‘HucK’.

sed 's/\<Huck\>/HucK/g' twain.txt

Question2:

# Use scp function to download file to AWS account.

chenjie$ scp -i 43372910.pem stdio.py [ubuntu@ec2-54-206-122-41.ap-southeast-2.compute.amazonaws.com](mailto:ubuntu@ec2-54-206-122-41.ap-southeast-2.compute.amazonaws.com):

# Make the stdio.py file to be executable and check whether it can be executed successfully.

chmod u+x stdio.py

ls -l stdio.py

#Linux command for the question

(a) python3 userargument.py python

(b) python3 userargument.py @!&^%

(c) python3 userargument.py 1234

(D) python3 userargument.py Bob

(e) userargument.py Bob

(F) userargument.py Alice Bob

Question3:

METHOD 1:

#define function as leap\_year(y)

>>> def leap\_year(y):

...     if y % 400 == 0:

...         return True

...     if y % 100 == 0:

...         return False

...     if y % 4 == 0:

...         return True

...     else:

...         return False

...

#use some numbers to check:

print(leap\_year(1900))

print(leap\_year(2004))

print(leap\_year(1800))

METHOD 2:

#Python code:

#question 3

#saved as AT1Q3.py

#load module sys

import sys

#Make first command argument in integer type, assign it as variable a

a=int(sys.argv[1])

if a%4!=0:

        print('False')

elif a%100!=0:

        print('True')

elif a%400!=0:

        print('False')

else :

        print('True')

#check

a=1900

python3 AT1Q3 $a

a=2004

python3 AT1Q3 $a

a=1800

python3 AT1Q3 $a

Question 4:

#question4 saved as AT1Q4

import random as rd

import sys

#make first and second command argument as integer numbers and assignment them to a and b

a=int(sys.argv[1])

b=int(sys.argv[2])

#check whether b>a

if b>a:

condion=True

else :

condion=False

#Ask to put another number if the condition is not met

while not condion:

b=int(input('put another greater number for the second one:'))

if b>a:

condion=True

else :

condion=False

#print out the required

print(rd.randint(a,b))

Question5:

#saved as AT1Q5.py

#download module datetime

from datetime import \*

import sys

#make first and second arugment as m(month) and d(date)

m=int(sys.argv[1])

d=int(sys.argv[2])

#change the number into date type

date1=date(2018,3,20)

date2=date(2018,6,20)

datetest=date(2018,m,d)

#check the condtion

if date1<datetest<date2:

print('True')

else :

print('False')

Question 6:

#saved as AT1Q6.py

#import math

from math import \*

#let the user to input principal, interest rate, and time

P=float(input('Principal P:'))

r=float(input('annual interest rate r:'))

t=float(input('number of years:'))

#return to the output

print(P\*e\*\*(r\*t))