IDENTY

Screening Test

No. of questions: 06 **Max time: 30 min**

Question 1:

Write a program that computes the net amount of a bank account based on the transaction log file provided (transaction.log). And write the final available balance in the transaction.log at the EOF. The transaction log format is shown as following:

D 100
W 200

D means deposit while W means withdrawal.
Suppose the following input is supplied to the program:
D 300
D 300
W 200
D 100

File o/p should be
D 300
D 300
W 200
D 100
Available balance : 500

Note- Consider the attachment transaction.log

Question 2:

Create an multidimensional array (5x4) with random int using numpy and do below,

a) Print the array
b) Add where condition to make all values greater than 50 to 100
c) Print the new array

Example :
Output 1:
array([[4, 2, 100, 1],
[3, 0, 100, 2],
[2, 0, 1, 1],
[4, 0, 2, 300],
[0, 0, 0, 200]])

Output 2:

```
array([[4, 2, 100, 1],
[3, 0, 100, 2],
[2, 0, 1, 1],
[4, 0, 2, 100],
[0, 0, 0, 100]])
```

Question 3:

Write a program that reads an image path through console and converts 50%(Horizontally or Vertically) of it to grayscale and saves the file.

Question 4:

Create an 1D array of length 10 with random Int and set every 2nd element to -10

Example:

[5,6,10,40,30,70,3,2,6,8]

[5,-10,10,-10,30,-10,3,-10,6,-10]

Question 5:

Create a 1D array A with random

create a random boolean array B with same a's shape

print A array with the selected elements from B (ie., print A array elements which is marked True in B array)

Example :

A= > [2,3,5,6,7,8,9,10]

B=> [True,False,False,True,True,False,True,True]

Output : [2,6,7,9,10]

Question 6:

Given Images and corresponding 4 bounding boxes, crop the region contained in bounding box and arrange them in a 2*2 matrix fashion and save it locally.

Note: Take the attached data.