

Name: _____

PID: _____

This is the first quiz of CSE255/DSE230

On your desk you should have only the exam paper and writing tools.

No hats or hoods allowed (unless religious items).

There are 4 questions in this exam, totalling 100 points.

Circle the correct answers.

You have 5 minutes to complete the exam.

Start by writing your name and PID on this page.

Good Luck!

I. Which types of locality take advantage of the fact that disk read heads move slowly? (

1. Temporal Locality
2. Spatial Locality
3. Neither Temporal nor Spatial
4. Both Temporal and Spatial

Consider the following code snippet:

```
X=range(1000000)
s=0
for i in range(1000000):
    s+=X[i]
```

II. Which variables benefit from temporal locality? _____

III. Which variables benefit from Spatial locality? _____

IV. Consider the storage of machine level commands. With respect to that storage, does the code snippet exhibit

1. Temporal Locality
2. Spatial Locality
3. Neither Temporal nor Spatial
4. Both Temporal and Spatial