

## Worksheet #36: UPC data distributions

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Name: \_\_\_\_\_ Netid: \_\_\_\_\_

In the following example from slide 20, assume that each UPC array is distributed by default across threads with a cyclic distribution. In the space below, identify an iteration of the `upc_forall` construct for which all array accesses are local, and an iteration for which all array accesses are non-local (remote).

Assume  $2 \leq \text{THREADS} < 100$ . Explain your answer in each case.

```
shared int a[100], b[100], c[100];
int i;
upc_forall (i=0; i<100; i++; (i*THREADS)/100)
    a[i] = b[i] * c[i];
```

