

Worksheet #36: UPC data distributions

Name 1: _____ Name 2: _____

In the following example from slide 22, 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 `THREADS >= 2`. 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];
```