

```
void foo(int* a, int* b, int* c, int dim)
{
    int i,j;
    for(j=0; j<dim; j++)
        for(i=0; i<dim; i++)
            c[i*dim+j] = a[i*dim+j] + b[i*dim+j];
}
```

Cannot analyze: The memory accesses can potentially alias

Value from past profile:
a = 10000; b = 20000; c = 30000; dim = 50

```
void foo(int* a, int* b, int* c, int dim)
{
    int i,j;
    for(j=0; j<dim; j++)
        for(i=0; i<dim; i++)
            c[i*dim+j] = a[i*dim+j] + b[i*dim+j];
}
```

Analysis result: no alias between loads and store
→ Loop parallelizable

*The parallelization is still speculative as the past profile doesn't necessarily reflect how the function will be used in the future