

```

For i = 1 to N
  For j = 1 to M
    B[i][j] = B[i+1][j-1]
  Endfor
Endfor

```

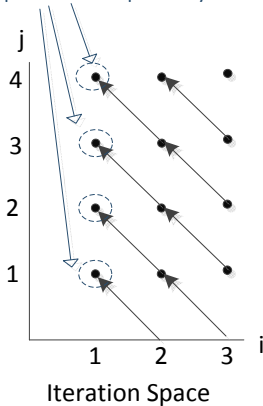
Distance vector: $[1, -1]$
 Direction vector: $[<, >]$

Outer loop carries
dependency

After loop interchange:
 Direction vector = $[>, <]$

Loop interchange is illegal
for this loop nest

Can be performed in
parallel if outer loop is
performed sequentially



```

For i = 1 to N
  For j = 1 to M
    B[i][j] = B[i-1][j-1]
  Endfor
Endfor

```

Distance vector: $[1, 1]$
 Direction vector: $[<, <]$
 After loop interchange:
 Direction vector = $[<, <]$

Loop interchange is legal
for this loop nest

