

Intermediate code to set a 10*10 matrix to an identity matrix

Find the Basic Blocks and draw the flow graph then apply some optimizations as you prefer.

```
for i from 1 to 10 do
    for j from 1 to 10 do
         $a[i, j] = 0.0;$ 
for i from 1 to 10 do
     $a[i, i] = 1.0;$ 
```

```
1)  i = 1
2)  j = 1
3)  t1 = 10 * i
4)  t2 = t1 + j
5)  t3 = 8 * t2
6)  t4 = t3 - 88
7)  a[t4] = 0.0
8)  j = j + 1
9)  if j <= 10 goto (3)
10) i = i + 1
11) if i <= 10 goto (2)
12) i = 1
13) t5 = i - 1
14) t6 = 88 * t5
15) a[t6] = 1.0
16) i = i + 1
17) if i <= 10 goto (13)
```