

(B) 11. 執行程式 (二) 後, A(3, 3) 的值為何? (A)16 (B)24 (C)30 (D)36。 統測

```
Dim A(3, 3) As Integer
For I = 1 To 3
  For J = 1 To 3
    A(I, J) = A(I - 1, J - 1) + (I + J) * 2
  Next J
Next I
```

程式 (二)

| A(0,0) | A(0,1) | A(0,2) | A(0,3) |
|-------------------|-------------------|-------------------|-------------------|
| A(1,0) | 4 | 6 | 8 |
| A(2,0) | 6 | 12 | 16 |
| A(3,0) | 4 | 16 | 24 |

解:即左上角那個人,加上自己的註標值相加*2,即是值. 因為迴圈從 1 開始.

若按照其迴圈跑其圖示如下:

即 I 跑 3 次

然後 J 跑 3 次

$$A(0,0) + (0+0) * 2$$

$$A(0,1) + (0+1) * 2 = 0 + 2 = 2$$

$$A(1,1) = A(0,0) + (1+1) * 2 = 0 + 4$$

| I | J | |
|---|---|---|
| 1 | 1 | $A(1,1) = 4$ |
| | 2 | $A(1,2) = A(0,1) + (1+2) * 2 = 0 + 6 = 6$ |
| | 3 | $A(1,3) = A(0,2) + (1+3) * 2 = 0 + 8 = 8$ |
| 2 | 1 | $A(2,1) = A(1,0) + (2+1) * 2 = 0 + 6 = 6$ |
| | 2 | $A(2,2) = A(1,1) + 8 = 4 + 8 = 12$ |
| | 3 | $A(2,3) = A(1,2) + 10 = 6 + 10 = 16$ |
| 3 | 1 | $A(3,1) = A(2,0) + 4 = 4$ |
| | 2 | $A(3,2) = A(2,1) + 10 = 6 + 10 = 16$ |
| | 3 | $A(3,3) = A(2,2) + 12 = 12 + 12 = 24$ |