

Sample Questions for **Computer Science A**

19. Consider the following code segment.

```
int [][] mat = new int [3] [4];

for (int row = 0; row < mat.length; row++)
{
    for (int col = 0; col < mat[0].length; col++)
    {
        if (row < col)
            mat[row][col] = 1;
        else if (row == col)
            mat[row][col] = 2;
        else
            mat[row][col] = 3;
    }
}
```

What are the contents of `mat` after the code segment has been executed?

- (A)  $\{\{2 \ 1 \ 1\}$   
     $\{3 \ 2 \ 1\}$   
     $\{3 \ 3 \ 2\}$   
     $\{3 \ 3 \ 3\}\}$
- (B)  $\{\{2 \ 3 \ 3\}$   
     $\{1 \ 2 \ 3\}$   
     $\{1 \ 1 \ 2\}$   
     $\{1 \ 1 \ 1\}\}$
- (C)  $\{\{2 \ 3 \ 3 \ 3\}$   
     $\{1 \ 2 \ 3 \ 3\}$   
     $\{1 \ 1 \ 2 \ 3\}\}$
- (D)  $\{\{2 \ 1 \ 1 \ 1\}$   
     $\{3 \ 2 \ 1 \ 1\}$   
     $\{3 \ 3 \ 2 \ 1\}\}$
- (E)  $\{\{1 \ 1 \ 1 \ 1\}$   
     $\{2 \ 2 \ 2 \ 2\}$   
     $\{3 \ 3 \ 3 \ 3\}\}$