```
mat0 = [1 2 3; 4 5 6; 7 8 9];
v1 = max(mat0, [], 1);
v2 = max(mat0, [], 2);
v3 = max(mat0, [], `all');
s = v1(1) + v2(1) + v3(1);
```

	1	2	3	
mat0	4	5	6	
	7	8	9	

#### M05-Q1: What is a value finally assigned to s?

```
mat0 = [1 2 3; 4 5 6; 7 8 9];
v1 = max(mat0, [], 1);
v2 = max(mat0, [], 2);
v3 = max(mat0, [], 'all');
s = v1(1) + v2(1) + v3(1);
```

	1	2	3
mat0	4	5	6
	7	8	9



```
vec0 = zeros(2,1);
mat0 = [1 1; 2 2];
mat1 = [mat0 vec0]
mat2 = cat(2, mat0, vec0)
mat3 = [vec0+1 vec0+2 vec0]
mat4 = flip([vec0 mat0], 2)
```

	1	1	
mat0	2	2	



### M05-Q2: Which of a matrix has a different value compared to the other three?

```
vec0 = zeros(2,1);
mat0 = [1 1; 2 2];

mat1 = [mat0 vec0]
mat2 = cat(2, mat0, vec0)
mat3 = [vec0+1 vec0+2 vec0]
mat4 = flip([vec0 mat0], 2)
```



```
vec = [1 2 3 4 5 6 7 8 9];
rem vec = rem(vec, 2);
val = sum(rem vec);
```



## M05-Q3: Which of the best describe the following script?

```
vec = [1 2 3 4 5 6 7 8 9];
rem_vec = rem(vec, 2);
val = sum(rem_vec);
```

```
mat0 = [1 2 3; 4 5 6; 7 8 9];
vec1 = sum(mat0)
vec2 = [];
vec3 = [];
for ii=1:3
    vec2 = [vec2 sum(mat0(:,ii))];
    vec3 = [vec3 sum(mat0(:,ii), 'all')];
end
vec4 = sum(mat0, 2)'
```



# M05-Q4: Which of a vector has a different value compared to the other three?

```
mat0 = [1 \ 2 \ 3; \ 4 \ 5 \ 6; \ 7 \ 8 \ 9];
vec1 = sum(mat0)
vec2 = [];
vec3 = [];
for ii=1:3
    vec2 = [vec2 sum(mat0(:,ii))];
    vec3 = [vec3 sum(mat0(:,ii), 'all')];
end
vec4 = sum(mat0, 2)'
```

```
[\sim, loc] = max(vec3)
val = vec1(loc);
fix(x)
             Truncates x to the nearest
             integer toward zero.
```

 $vec1 = [-1.2 \ 6.3 \ 7.5 \ -3.8]$ 

vec2 = vec1-fix(vec1);

vec3 = abs(vec2)

### M05-Q5: What is a value finally assigned to val?

```
vec1 = [-1.2 6.3 7.5 -3.8]
vec2 = vec1-fix(vec1);

vec3 = abs(vec2)
[~, loc] = max(vec3)
val = vec1(loc);
```

```
fix (x) Truncates x to the nearest integer toward zero.
```

```
vec = [2 1 5 7 4 -2 3 -9 4 -1];
n v = numel(vec);
val = vec(1);
for ii=2:n v
     if (\text{vec}(ii) < \text{val}) \&\& (\text{vec}(ii) > 0)
           val = vec(ii);
    end
end
```



### M05-Q6: What is a value finally assigned to val?

```
vec = [2 1 5 7 4 -2 3 -9 4 -1];

n_v = numel(vec);

val = vec(1);

for ii=2:n_v
    if (vec(ii) < val) && (vec(ii) > 0)
        val = vec(ii);
    end
end
```