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```
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
% ENGR 133
% Program Description:
%
% Assignment Information
%   Assignment:      Ma2 Task7
%   Author:          Roshan Sundar, rmsundar
%   Team ID:         LC1-04
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
```

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## INITIALIZATION

```
v = [10 5 1 8 -9 0 2 3];
```

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## CALCULATIONS

```
v1 = v;
descend = zeros(1, length(v));
for i=1:length(v1)
    [M,I] = max(v1);
    descend(i) = M;
    v1(I) = min(v1) - 1;
end

v2 = v;
ascend = zeros(1, length(v));
for i=1:length(v2)
    [M,I] = min(v2);
    ascend(i) = M;
    v2(I) = max(v2) + 1;
end
```

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## OUTPUTS

```
disp('Vector sorted in descending order:')
disp(descend)
disp('Vector sorted in ascending order:')
disp(ascend)
```

```
Vector sorted in descending order:
    10     8     5     3     2     1     0    -9
```

```
Vector sorted in ascending order:
    -9     0     1     2     3     5     8    10
```

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## ACADEMIC INTEGRITY STATEMENT

I have not used source code obtained from any other unauthorized source, either modified or unmodified. Neither have I provided access to my code to another. The project I am submitting is my own original work.

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