Group #:
Names:

EOSC 211 – Week 7 – Midterm Practice

EXERCISE 1: If `a=[7 6 5 4 3 2 1];`, what would be the values of `b, c, d,` and `e` if:

```
b=a(1:3:7);
```

```
c=[a/2;-a];
```

```
d=a(1:2).*a(6:7)
```

```
e=[1 1;2 2]'.*[a([1 2]);a([2 3])]
```

EXERCISE 2: What is the result of the following expressions?

```
1:6==2+3*1
```

```
1>6:2*3+1
```

```
3^0/4--3/4:3
```

```
3^0/4-(-3/4:3)
```

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EXERCISE 3: This piece of matlab code is supposed to find local minimums in the input time series, i.e. points that have values less than their neighbours on either side, and return their indices in x. But it has some bugs in it. Explain what they are and fix them.

```
% y is a 1x100 vector given as input

k=1;
while k<100,
   if y(k)<y(k+1) & y(k)>y(k-1),
      x(k)=k;
   k=k-1
end;
```