MATLAB MID

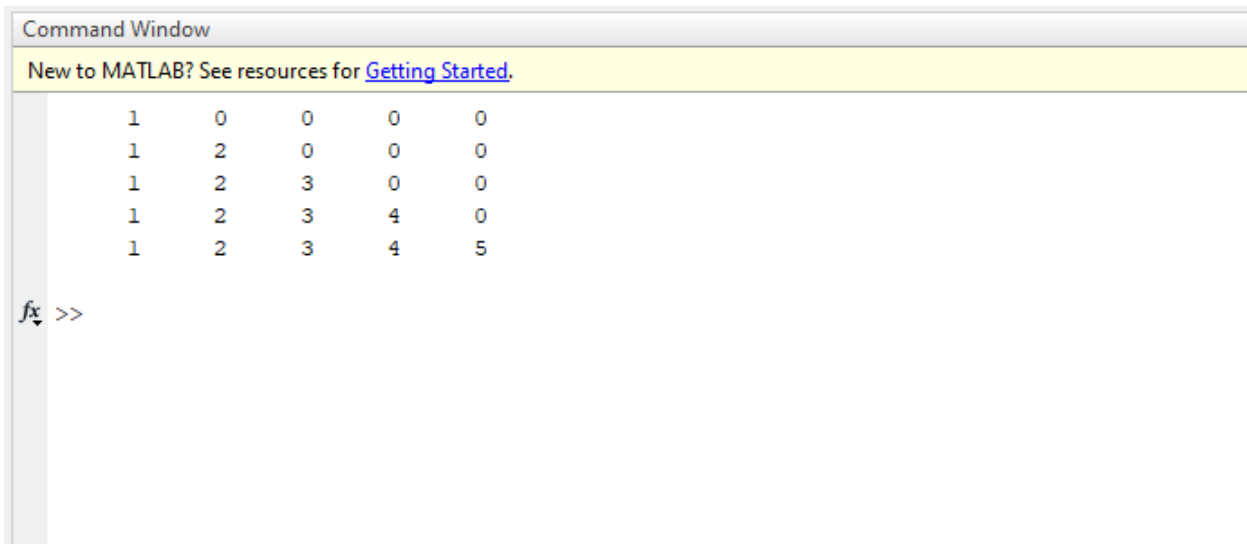## Question No#1:

Code :

```
clc
clear all

%n=input ('Enter Value of n ');
b=zeros(5,5);
for i=1:5
for j=1:i
matrix(i,j)=j;
end
end
disp(matrix)
```

output:

Command Window

New to MATLAB? See resources for Getting Started.

```
     1     0     0     0     0
     1     2     0     0     0
     1     2     3     0     0
     1     2     3     4     0
     1     2     3     4     5
```
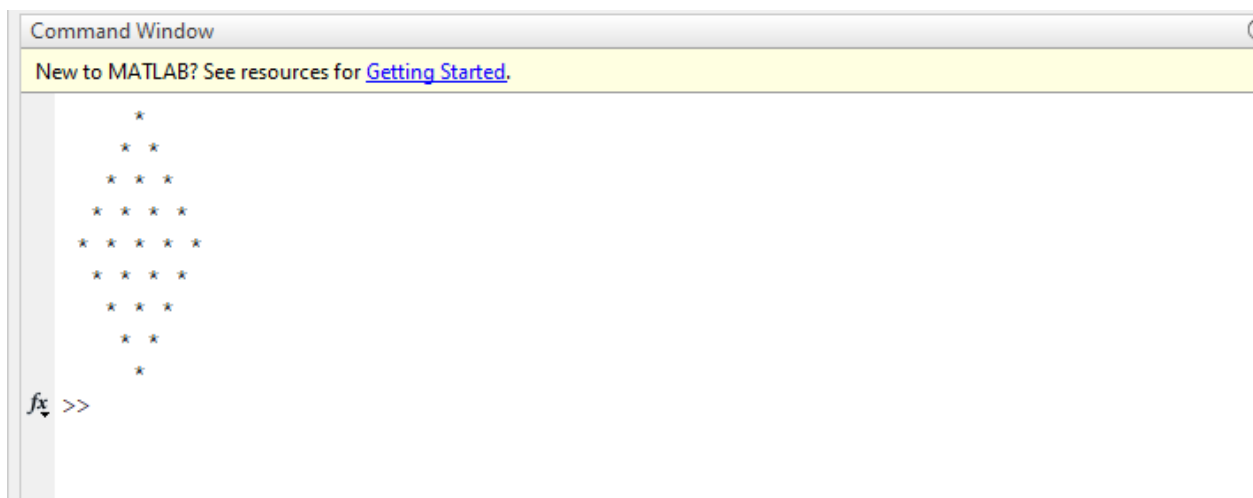
fx >>

Question No#2:

Code:

```
clc
clear all
for x=1:5
for j=4:-1:x
fprintf(' ');
end
for j=1:x
fprintf(' *');
end
fprintf('\n');
end
for x=1:4
for j=1:x
fprintf(' ');
end
for j=4:-1:x
fprintf(' *');
end
fprintf('\n');
end
```
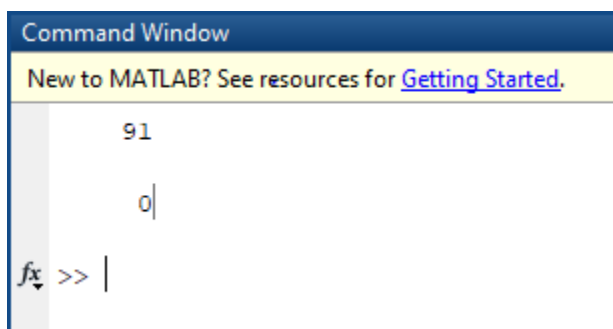
OUTPUT:

Question No#3:

Code:

```
clc
clear all

A=[2 5 7 9; 3 4 5 0; 8 4 3 1; 77 55 48 91];
MAX=A(1,1);
for i=1:4
for j=1:4
if MAX<= A(i,j);
MAX=A(i,j);
end
end
end
disp(MAX)

MIN=A(1,1);
for i=1:4
for j=1:4
if MIN > A(i,j);
MIN =A(i,j);
end
end
end
disp(MIN)
```

output:

Command Window

New to MATLAB? See resources for Getting Started.

```
     91

      0|

fx >> |
```

Question No#4:

```matlab
clc
clear all

a= input ('Enter the population of city A ');
b=input ('Enter the rate of increase ');

c= input ('Enter the population of city B ');
d=input ('Enter the rate of increase ');
year=0;
if (a < c && b > d)


while (a < c);

a = ((a / 100) * a) + a; n one year
c= ((c / 100) * c) + c;
year= year+1;

end

end
disp(year)
```

<u>output:</u>


```
Command Window
New to MATLAB? See resources for Getting Started.
    Enter the population of city A 5000
    Enter the rate of increase 10
    Enter the population of city B 10000
    Enter the rate of increase 15
        0

fx >> |
```