CAED LAB MID

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Q3:

Source code:

```
end A=[2,5,7,9;3,4,5,0;8,4,3,1;77,55,48,91]
mx=A(1);
mn=A(1);
for p=2:numel(A)
 if A(p)>mx
  mx=A(p);
  disp('Maximum Number in matrix is')
  mx
 end
  if A(p)<mn
      mn=A(p);
 disp('Minimum Number in matrix is')
mn
  end
```

OUTPUT:

```
Minimum Number in matrix is

mn =

     0

Maximum Number in matrix is

mx =

    91

>>
```

Q2:

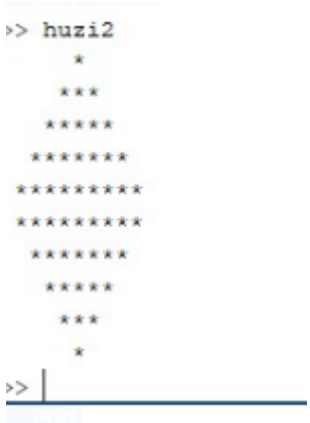
CODE:

```
or i=1:2:9
   for l=9:-2:i
      fprintf(' ')
   end

   for j=1:i
      fprintf('*')
   end
      fprintf('\n')
end
for i=9:-2:1
   for l=i:2:9
      fprintf(' ')
   end
```

```
  for j=i:-1:1
     fprintf('*')
  end
     fprintf('\n')
end
```

output:



Q4

Source code:

```
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 ')
count_years=0;
while a < b

 a = a +( a * (b /100) );
```

```
 c = c +( c * (d /100) );
   count_years=count_years+1;
end
disp ('count_years')
```

output:

```
Enter the population of city A 10000
A =
       10000
Enter the rate of increase 10
roiA =
    10
Enter the population of city B5000
B =
        5000
Enter the rate of increase 5
roiB =
     5
```

Q1:

Code:

```
matrix=zeros(5,5);
for i=1:5
   for j=1:i
      matrix(i,j)=j;
   end
```

```
end

disp(matrix)
```

output:

```
    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

>>
```

Q5

CODE:

```
num1=0:1:3

 num2=0:1:4

 for a=num1

for b=num2

res=ack(a,b)

end

end

function res=ack(num1,num2)

    if num1==0

      res = num2+1;

    elseif num1>0 && num2==0

      res = ack(num1-1,1);
```

```
    elseif num1>0 && num2>0
      res = ack(num1-1,ack(num1,num2-1));
    end
end
```

output:

output was giving error.

GITHUB LINK AND SCREENSHOT:

https://github.com/MuhammadHuzaifa1234/huzaifa.git