

# Solutions to Practice Exercise Questions

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## Q:1 -> Solution:

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

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

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## Q:2 -> Solution:

```
n = input('Enter a number');
A = zeros(n);
m = (n+1)/2;
for i=1:m
    A(i:end-i+1,i) = (m-i) +1;
    A(i,i:(end-i+1)) = (m-i) +1;
    A(i:(end-i+1),end-i+1) = (m-i) +1;
    A(end-i+1, i:end-i+1) = (m-i) +1;
end
disp('The bullseys matrix is');
A
```

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## Q:3 -> Solution:

```
n = input('Enter an even number greater than 2\n');

p = primes(n);
flag = 0;

for i=1:length(p)
    for j =1:length(p)
        if p(i)+ p(j) == n
            flag = 1;
            fprintf('The two prime number are %d and %d \n',p(i),p(j));
            break;
        end
    end
end
```

```

        end
        if(flag==1)
            break;
        end
    end
end

```

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**Q: 4 -> Solution:**

```

n = input('Enter a number n\n');

A = zeros(n);
for i=1:n
    if rem(i,2) ~= 0
        A(i,:) = ((n*i)-n)+1:1:n*i;
    else
        A(i,:) = n*i:-1:((n*i)-(n-1));
    end
end
A

```

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**Q: 5 -> Solution:**

```

A = input('Enter a numerical vector array in the form [5 8 9 8 7] \n');

for i=2:length(A)
    if A(i) > A(i-1)
        flag = 0;
    else
        flag = 1;
        disp('Not monotonically increasing');

        break;
    end
end

if flag ==0
    disp('Monotonically increasing');
end

```

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**Q: 6 -> Solution:**

```

n = input('Enter the size of the matrix');
x = zeros(n);

for i=1:n
    if rem(i,2)== 0
        x(i,1:2:end) = 1;
    else

```

```
        x(i,2:2:end) = 1;  
    end  
end
```

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**Enjoy Matlab**