

1. What are the results for the following command:

>> A=[1 0 9 8 7 5];

>> A>2

>> A<=2

>> A(A>2)

>> find(A)

→ non-zero value's positions.
find(A~=0) 13456

>> find(A>2)

>> A(find(A>2))

>> A(1 1 0 1 1)

>> A(logical(1 1 0 1 1))

>> A(logical([1 1 0 1 1]))

$$A = [0 \ 1 \ 2 \ 3 \ 0 \ 1]$$

$$AA = \underline{A} == 0;$$

$$AA = [1 \ 0 \ 0 \ 0 \ 1 \ 0]$$

$$B = \text{sum}(AA);$$

$$\text{if } B \sim= 0;$$

No semi-colon





fprintf('There are 0's in the matrix');

$$\text{elseif } B == 0; \quad \text{No - semi-colon}$$

(No space)
fprintf('There are no 0's');

else
fprintf(' ');
end

end  → No semicolon


 if _____
 ;
else  NO conditions
 ;

if 
;

elseif 
;

elseif 
;


else 

end ;

④

$A = [22 \ 23 \ 25 \ 999 \ 999]$

$AA = A == 999;$

$B = \text{sum}(AA);$ $[0 \ 0 \ 0 \ 1 \ 1]$ 

$A(\text{find}(A \neq 999)) = []$

If ~~$B = 0$~~ $B = 0$.

$\text{fprintf}('No bad values')$

else

$\text{fprintf}('we have %3i$

bad values, B)



end

5

$A = \text{randi}([-5, 5]);$

$d = b^2 - 4ac$

$(a = \text{randi}([-5, 5]));$

$b = \underline{\hspace{2cm}}$

$c = \underline{\hspace{2cm}}$

if $a == 0$:

$\text{fprintf}(' \text{No solutions}')$

elseif $d > 0$

two real roots

$$\frac{-b \pm \sqrt{b^2 - 4ac} > 0}{2a}$$

elseif $d == 0$

one real root

else

No ~~real~~ real roots