MATLAB ASSIGNMENT - 2

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14 A

CSE SEM-2

300102219015

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1) ----------------------------------------------------------------------------------

data = [40,20,30,10];

labels = {'Hindi', 'Tamil', 'Bengali', 'Marathi'};

pie(data , labels)



2) ----------------------------------------------------------------------------------

active = [148454;57962;10743;69252;69708;32649;19900];

recovered = [248615;178178;119724;60024;46694;46803;46256];

deceased = [14729;3838;3936;1281;2230;1587;1536];

confirmed = [411798;239978;134403;130557;118632;81039;67692];

data = [active,recovered,deceased,confirmed];

bar(data)

legend('Active','Recovered','Deceased','Confirmed')



3) ----------------------------------------------------------------------------------

year = [2017,2018,2019];

placement = [60;78;75];

higher\_studies = [20;22;30];

d = [placement,higher\_studies];

bar(year,d)



4) ----------------------------------------------------------------------------------

t = 2010:2015;

production = [30000,25000,40000,65000,45000,20000];

bar(t,production)

legend('time','production')



5) ----------------------------------------------------------------------------------

y1=sin(x);

y2=exp(1) - 0.4\*sin(x);

plot(x,y1);

hold on;

plot(x,y2);

legend('sin x','e - 0.4sin x')



6) ----------------------------------------------------------------------------------

x = 0;0.5:10;

m=0.5;

c=-2;

syms y;

eqn = y==m\*x +c;

solve(eqn,y)

ans =

-2

7) ----------------------------------------------------------------------------------

r = input('enter radius :')

enter radius :5

r =

5

syms x;syms y;

ezplot(x.^2 + y.^2 - r\*r)



8) ----------------------------------------------------------------------------------

a = input('enter a :')

enter a :5

a =

5

b = input('enter b :')

enter b :2

b =

2

syms x; syms y;

ezplot(((x.^2)/(a\*a) + ((y.^2)/(b\*b)) - 1))



9) ----------------------------------------------------------------------------------

x = -1:0.1:1;

y1 = exp(x);

y2 = exp(x)/2;

y3 = 0;

y4 = -exp(x)/2;

y5 = exp(x);

figure

subplot(3,2,1) , plot(x,y1,'r') , ylabel("y1") , xlabel("x"),legend('y1','x')

subplot(3,2,2) , plot(x,y2,'--') , ylabel("y2") , xlabel("x"),legend('y2','x')

subplot(3,2,3) , plot(x,y3,'o') , ylabel("y3") , xlabel("x"),legend('y3','x')

subplot(3,2,4) , plot(x,y4,'-.') , ylabel("y4") , xlabel("x"),legend('y4','x')

subplot(3,2,5) , plot(x,y5,'b') , ylabel("y5") , xlabel("x"),legend('y5','x')



10) --------------------------------------------------------------------------------

x = -5:0.1:5;

logistic = 1./(1+exp(-x));

plot(x,logistic)

