**EXP4**

**Program:**

clear;

clc;

p=3;

q=11;

n=p\*q;

phi=(p-1)\*(q-1);

e=7;

d=1;

t=1;

P=5;

plaintext=P;

disp("The plain text is=");

disp(P);

while t==1 do

if(modulo(e\*d,phi)==1)

t=0;

else

d=d+1;

end

end

c=modulo(P^e,n);

disp('CIPHER TEXT');

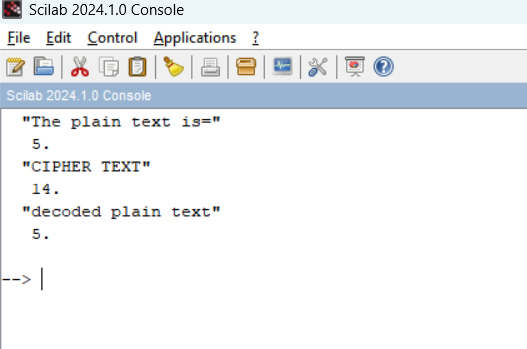
disp(c);

P=modulo(c^d,n);

disp('decoded plain text');

disp(P);

**Output:**

****