

ASSIGNMENT:-3

QUESTION:-1

```
import java.util.Scanner;

class RPM
{
void calrpm()
{
int rpm,n=0,p,i=0,crpm;

Scanner sc = new Scanner(System.in);
System.out.println("Enter rpm ::");
rpm= sc.nextInt();
do
{
i++;
crpm =rpm;
n= (rpm%10)*(rpm%10);
n += ((rpm/10)%10)*((rpm/10)%10);
n += ((rpm/100)%10)*((rpm/100)%10);
n += ((rpm/1000)%10)*((rpm/1000)%10);
n +=((rpm/10000))*((rpm/10000));
n = n*323;
p= (rpm%10)*1000 + (rpm/10);
p= n + p;
rpm=p;
}while((p<=8*crpm)&&(i<=10));
if(p>8*crpm)
{
System.out.println("Limit Exceeded in"+i+" years!!!");
System.out.println("final rpm =" +p);
}
else
System.out.println("Limit not exceeded in 10 years");
System.out.println("final rpm =" +p);
}

public static void main( String arg[])
{
demo obj = new demo();
obj.calrpm();
}
}
```