1. reverse of a number
2. palindrome of a number
3. Count digits of a number
4. arm strong number or not

1 sol=>

Int original =n

n=854

Int rev=4

While(n!=0)

{

rev=rev*10+n%10;

n=n/10

}

System.out.println(rev);

Step1: rev=0 n =8544 true new rev=0*10+4 new n= 854

Step2: rev=4 n=854 true new rev=4*10+4 newn=85

Step3: rev=44 n=85 newrev=44*10+5 newn=8

Step4: rev=445 n=8 newrev=445*10+8 newn=0

Step5: rev=4458 n=0 false

2.palindrome of number

121 i/p

121 then palindrome of a number

13351

15331 not a palindrome of a number

```
Int original =n
  n=0

Int rev=0
While(n!=0)
{
 rev=rev*10+n%10;
 n=n/10
}
If(rev==orginal){
    System.out.println(“palindrome of a number)
}
Else {
   System.out.println(“not a palindrome of a number”);
}
```

Count digits of a number

i/p=8544 op=4

```
int count=0
int n=8544;
while(n!=0){
count ++;
n=n/10;
}
Print(count)
```

Step1: count =0 n=8544 true newcount=1 new n=854

Step2: count =1 n=854 true newcount=1+1 new n=85

Step3:count =2 n=85 true newcount =2+1 newn=8

Step4: count =3 n=8 true newcount =3+1 new n=0

Step5: count =4 n=0 false

arm strong number or not abc=a*n+b*n+c*n;

n=number of digits

153=1*1*1+5*5*5+3*3*3=1+125+27=153 => arm strong number

12=1*1+2*2=5 =>not arm strong number

Steps: 1. Count number of digit

Step2: remove the last digit and store to one value and cube the value and store

```
int c=0;
		int n=153;
		int sum=0;
		int intial=n;
		int original=n;

		while(n!=0) {
			c++;
			n/=10;
		}

		System.out.println(c);


//		 c =3  n=0
		 while(intial!=0) {

			sum=sum+(intial%10)*(intial%10)*(intial%10);
			intial/=10;
		 }

		 // intial =0


		 if(sum==original) {
			System.out.println("armstrong number");
		 }
		 else {
			System.out.println("not armstrong number");
		 }
	}
```

```java
package Problems;

public class Armstrongnumber {

	public static void main(String[] args) {
		// TODO Auto-generated method stub
		int c=0;
		int n=153;
		int sum=0;

		int original=n;



//		c =3  n=0
		while(n!=0) {

			sum=sum+(n%10)*(n%10)*(n%10);
			n/=10;
		}

		// intial =0


		if(sum==original) {
			System.out.println("armstrong number");
		}
		else {
			System.out.println("not armstrong number");
		}
	}

}
```