Program :

```
package LogicalProg;

public class SumDigit {

	public static void main(String[] args) {

		int num = 12345,rem,sum=0;

		while(num>0) //iteration = 5
		{
			rem = num%10;  //1 % 10 = 1
			sum = sum + rem;  //14 + 1 = 15
			num = num / 10;  //0
			System.out.println("Sum by iteration = " + sum);
		}
		System.out.println("--------------------");
		System.out.println("Final Sum = " + sum);
	}
}
```

Program :

```
package LogicalProg;

public class ReverseNum {

	public static void main(String[] args) {
//12345 = 54321
		int num = 12345,revNum=0,rem,multiFactor=10000;
		System.out.println("Origional Number = " + num);
		for(int i=0;i<5;i++)
		{
			rem = num % 10;  //4	//5
			num = num / 10;  //1234 -> 123
			revNum = revNum + rem*multiFactor; //50000 + (4x1000) =
54321
			multiFactor = multiFactor / 10;    //1000 -> 100
			System.out.println("Reverse by interation = " + revNum);
		}
		System.out.println("Final Reversal = " + revNum);
	}

}
```

Program :

```
package LogicalProg;

public class ReverseNumByString {
```

```
	public static void main(String[] args) {

		int num = 123456789; //5 4 3 2 1
		String strNum = Integer.toString(num);
		String revNum = "";

		for(int i = strNum.length()-1;i>=0;i--)
		{
			char ch = strNum.charAt(i);
			revNum = revNum + ch;
		}
		System.out.println("Reverse Num = " + revNum);
	}
}
```

Program :

```
package LogicalProg;

public class ReverseString {

	public static void main(String[] args) {

		String str = "Harry",revStr = "";

		for(int i = str.length()-1;i>=0;i--)
		{
			char ch = str.charAt(i);
			revStr = revStr + ch;
		}
		System.out.println("Reverse String = " + revStr);
	}
}
```

Program :

```
package LogicalProg;

public class PalindromeString {

	public static void main(String[] args) {
		String str = "dad",revStr = "";

		for(int i = str.length()-1;i>=0;i--)
		{
			char ch = str.charAt(i);
			revStr = revStr + ch;
		}

		if(str.equals(revStr))
			System.out.println("Given string is Palindrome");
```

```
                else
                System.out.println("Given string is not Palindrome");
        }
}
```

Program :

```
package LogicalProg;

public class ReverseSentence {

        public static void main(String[] args) {

                String sentence = "I am post graduate";
                System.out.println("Origional Sentence = " + sentence);
                String splitSent[] = sentence.split(" ");
                System.out.print("Reverse Sentence =   ");
                for(int i = splitSent.length-1;i>=0;i--)
                        System.out.print(splitSent[i] + " ");
        }
}
```