1. A shop will give discount of 10% if the cost of purchased quantity is more than 1000.

Ask user for quantity or you can use a static value.

Suppose, one unit will cost 100

Judge and print total cost for user

```
package com.company;

import java.util.Scanner;
public class Discount{
    public static void main (String []args){
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter the quantity");
        int a = sc.nextInt();
        int totalPrice = a * 100;
        if((totalPrice)> 1000){
            System.out.println("You get a discount of "+(0.1 * totalPrice)+"
and your total cost "+(totalPrice- (0.1* totalPrice)));
        }
        else{
            System.out.println("The price is "+ totalPrice);
        }
    }
}
```

2. Write a program to check if a year is leap year or not. If a year is divisible by 4 then it is leap year but if the year is century year like 2000, 1900, 2100 then it must be divisible by 400.

```
package com.company;

import java.util.Scanner;

        public class Leapyear{
    public static void main(String[] args){
        Scanner a = new Scanner(System.in);
        System.out.println("Enter a year: ");
        int year = a.nextInt();
        if (year% 4 == 0){
            if (year% 400 == 0){
                System.out.println("Yes it is a centuries year");
            }
            else{
                System.out.println("it is  a leap year");}}
   else{
                    System.out.println("No it is not a leap year");
                }
            }
        }
```

3. A 4 digit number is entered through keyboard. Write a program to print a new number with digits reversed as of orignal one. E.g.-

INPUT : 1234 OUTPUT : 4321

INPUT : 5982 OUTPUT : 2895

```
package com.company;

public class Reversethedigit{
    public static void main(String []args){
        int num = 1234, reverse = 0;
        for(;num != 0; num = num/10){
            int remainder = num%10;
            reverse = reverse*10 + remainder;
        }
        System.out.println("The reverse of the given number is:" + reverse);

    }
}
```

4. Write a program to display the selling price of the item according to the given discount percent which is based on the different categories. Categories Discounts A 60% B 40% C 20% D 10% Hint[a. declare a float variable to store marked price of an item. b. declare character variable to store the category of that item. c. use the if condition to find the selling price. sp=mp-(mp * discount%)]

```
package com.company;

public class SellingPrice {
    public static void main(String []args){

        float mp = 1500f;
        String cat = "C";

        if(cat == "A")

    {
        System.out.println(mp - (mp * 0.6));
    }
    else if (cat == "B"){
            System.out.println(mp - (mp * 0.4 ));}
    else if (cat == "C") {
            System.out.println(mp-(mp* 0.2));
            }
    else if (cat == "D") {
            System.out.println(mp - (mp * 0.1));
        }
    else {
            System.out.println("Please buy something");
        }
            }
        }
```

5. Solve the above Q.4 by using switch statement.

```java
package com.company;

public class switchmethodSellingPrice {
    public static void main(String[] args){
        float mp = 1500f;
        String cat = "C";
        switch (cat){
            case "A":
                System.out.println(mp - (mp * 0.6));
                break;
            case "B":
                System.out.println(mp-(mp * 0.4));
                break;
            case "C":
                System.out.println(mp -(mp * 0.2));
                break;
            case "D":
                System.out.println(mp -(mp* 0.1));
                break;
            default:
                System.out.println("Invalid");
        }
    }
}
```