Question :2 Write a program to input long integer data not less than 5 digits. Your program should reject it if data is less than 5 digits and ask to re-enter. In the input, last four digits will be taken as year(the validity of the year should be checked that the year should be within 1900 to 3000 otherwise the computer should reject the input and ask to re-enter data) and remaining digits as total number of days. Your program should display the output as actual data(using number of days extracted) followed by month name and actual year.

Sample Input : Enter a date value not less than 5 digits
272008
Sample Output:The required date as per the entered value:
27 January 2008
Sample Input :Enter a date value not less than 5 digits
802005
Sample Output The required date as per the entered value:
21 March 2005

Sample Input :Enter a date value not less than 5 digits
5002019
Sample Output The required date as per the entered value:
13 May 2020
Sample Input Enter a date value not less than 5 digits
2008
Sample Output Invalid Date!!..Re-enter value not less than 5 digits
Solution :

```java
import java.util.*;
class Date_1
{
  public static void main()
  {
    Scanner sc=new Scanner(System.in);
    String month[]={"","January","February","March","April","May","June","July","August",
        "September","October","November","December"};
    int dm[]={0,31,28,31,30,31,30,31,31,30,31,30,31};
    int i,j,d,c=0,days,y,date;
    System.out.println("Enter a date value not less than 5 digits");
    d=sc.nextInt();
    while(d<10000 || d%10000<1900 || d%10000>3000)
    {
      System.out.println("Invalid Date!!..Re-enter value not less than 5 digits");
      d=sc.nextInt();
    }
    y=d%10000;  // to find out year
    days=d/10000;  // to calculate the number of days
    if(days>365)
```

[handwritten calculations in the margin:]

2008

$272008 \% 10000$

$10000 \overline{)272008} (27$
  270000
  $\overline{\quad 2008}$

$272008 / 10000 = 27$

00 2008

```
        {
            while(days>365)
            {
                y++;
                if(y%4==0)
                {
                    dm[2]=29;  // to check leap year
                    days=days-366;
                }
                else
                {
                    dm[2]=28;
                    days=days-365;
                }
            }
        }
        else
        {
            if(y%4==0)
            dm[2]=29;
            else
            dm[2]=28;
        }
        for(i=1;i<=12;i++)
        {
        c=c+dm[i];
        if(c>days)
            break;
        } //end of i loop
        c=0;
        for(j=1;j<i;j++)
        {
        c=c+dm[j];
        } //end of j loop
        date=days-c;
        System.out.println("The required date as per the entered value:");
        if(date==0)
        System.out.println(dm[i-1]+" "+month[i-1]+" "+y);
        else
        System.out.println(date+" "+month[i]+" "+y);
    }
}
```

Question 3:Design a program which accepts your date of birth in DD/MM/YYYY format. Check Whether the date is valid or not. If it is valid , display "Valid Date".

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