**Experiment 7 :**

package kmp\_matcher;

import java.util.\* ;

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\* @author Pradyot Patil

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public class KMP\_Matcher {

public static void main(String[] args) {

Scanner sc=new Scanner(System.in) ;

String pattern,text ;

System.out.println("Enter the Pattern: ") ;

pattern=sc.next() ;

System.out.println("Enter the Text: ") ;

text=sc.next() ;

String match="0"+pattern+"^"+text ;

int pi[]=new int[match.length()+1] ;

pi[1]=0 ; int q,k=0 ;

for(q=2;q<match.length();q++)

{

while(k>0 && match.charAt(k+1)!=match.charAt(q))

k=pi[k] ;

if(match.charAt(k+1)==match.charAt(q))

k++ ;

pi[q]=k ;

}

int flag=0 ,count=0;

for(q=pattern.length()+3;q<=match.length();q++)

{

if(pi[q]==pattern.length())

{

count++ ;

}

}

System.out.println("Pattern is presemt : "+count+" times") ; }

}

**OUTPUT 1 :**

Enter the Pattern: abab

Enter the Text: abscdefababklababdf

Pattern is present : 2 times

**OUTPUT 2 :**

Enter the Pattern: abab

Enter the Text: abcdefghsg

Pattern is present : 0 times