**Experiment No: 6.1**

**Aim:**

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| --- |
| Write a program to show the use of various member methods of String class. |

**Code:**

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| --- |
| **import** java.util.\*;  **public** **class** a1 {  **public** **static** **void** main(String as []) {  String string1= "HIMANSHU";  String asa=**new** String();  //string.length  **int** size=string1.length();  //string.charat  **for** (**int** i=0;i<size;i++) {  System.***out***.println(string1.charAt(i));  }  //string.contains("STring")  **boolean** st=string1.contains("HIM");  System.***out***.println("Contains HIM?="+st);  //string.equals(String ob or charseq)  st=string1.equals("himanshu");  System.***out***.println("Equal to himanshu?="+st);  st=string1.equalsIgnoreCase("himanshu");  System.***out***.println("Equal to himanshu ignore case?="+st);  //string.concat(string or charseq)  string1.concat(asa);  System.***out***.println(string1); //It returns the same string since String objects are immutable  //string.toCharArray() return stream of chars so a char arry is required to old that  **char** array[]=string1.toCharArray();  **for**(**int** i=0;i<array.length;i++) {  System.***out***.println(array[i]);  }  }} |

**Output:**

|  |
| --- |
| H  I  M  A  N  S  H  U  Contains HIM?=true  Equal to himanshu?=false  Equal to himanshu ignore case?=true  HIMANSHU  H  I  M  A  N  S  H  U |

**Experiment No: 6.2**

**Aim:**

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| Write a program to check whether a String input from the user is a palindrome or not. |

**Code:**

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| --- |
| **import** java.util.Scanner;  **public** **class** a1 {  **public** **static** **void** main(String as []) {  Scanner ip = **new** Scanner (System.***in***);  String string1 = ip.next();  String buffer =**new** String();  **int** size=string1.length();  **for** (**int** i=size-1;i>=0;i--) {  buffer+=string1.charAt(i);  }  **if** (buffer.equals(string1)) {  System.***out***.println("THE ENTERED STRING IS PALINDROME");    }  **else**  System.***out***.println("THE STRING IS NOT A PALINDROME");      }  } |

**Output:**

|  |
| --- |
| aadaa  THE ENTERED STRING IS PALINDROME |

**Experiment No: 6.3**

**Aim:**

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| --- |
| Write a program to print the number of vowels present in a line of text. |

**Code:**

|  |
| --- |
| **import** java.util.Scanner;  **public** **class** maiclass {  **public** **static** **void** main(String[] args) {  **int** count=0;  Scanner ip=**new** Scanner(System.***in***);  System.***out***.println("Enter a string");  String S1=ip.nextLine();  S1=S1.toLowerCase();  String vowel="aeiou";  **char** data[]=vowel.toCharArray();  **int** size=data.length;  **for**(**int** j=0;j<S1.length();j++) {  **for** (**int** i=0;i<size;i++) {  **if**(data[i]==S1.charAt(j)) {  count++;  }}}  System.***out***.println("count of vowels is :"+count);  }} |

**Output:**

|  |
| --- |
| Enter a string  Hello are u there?  count of vowels is :7 |

**Experiment No: 6.4**

**Aim:**

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| --- |
| Write a program to show the use of member methods that are common in StringBuffer and StringBuilder classes. |

**Code:**

|  |
| --- |
| **public** **class** istaclass {  **public** **static** **void** main(String as []) {  //Stringbuffer and builder objects are mutable  StringBuffer ob1= **new** StringBuffer("HELLO");  StringBuilder ob2=**new** StringBuilder("WELCOME"); //Initialises the string with welcome  StringBuilder ob3=**new** StringBuilder();//Initialises the strung with capacity of 16 chars of  StringBuilder ob4=**new** StringBuilder(9);//Initialses the strung with capacity of 9 chars  ob1.append(" HEY ");  ob1.insert(0, "HI ");  System.***out***.println(ob1);  ob2.append("s you");  ob2.deleteCharAt(0);  ob2.compareTo(ob3);  System.***out***.println(ob1.capacity());//16 + no of charc already initilised  System.***out***.println(ob3.capacity());  System.***out***.println(ob4.capacity());  ob2.replace(0,0, "W");// replace index from 0 to 0 by "W"  System.***out***.println(ob2);  ob2.reverse();  System.***out***.println(ob2);  }  } |

**Output:**

|  |
| --- |
| HI HELLO HEY  21  16  9  WELCOMEs you  uoy sEMOCLEW |

**Experiment No: 6.5**

**Aim:**

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| --- |
| Write a program to merge the names present in String arrays S1 and S2 into another String array S3. The contents of S1 should appear first and then S2 in the destination String array S3. |

**Code:**

|  |
| --- |
| **import** java.util.Arrays;  **public** **class** asd {  **public** **static** **void** main(String as []) {  String s1[]= {"HELLO","I'M","HUMAN"};  String []s2= {"HELLO","I'M","AN","ANIMAL"};  *merge*(s1,s2);  }  **static** **void** merge(String[] s1,String []s2) {  **int** size1=s1.length;  **int** size2=s2.length;  **int** i=0,j=0;  String s3[] = **new** String [size1+size2];  **for**(;i<size1;i++) {  s3[i]=s1[i];  }  **for**(;j<size2;j++) {  s3[i]=s2[j];  i++;  }  System.***out***.println(Arrays.*toString*(s3));  }  } |

**Output:**

|  |
| --- |
| [HELLO, I'M, HUMAN, HELLO, I'M, AN, ANIMAL] |

**Experiment No: 6.6**

**Aim:**

|  |
| --- |
| Write a program to merge the contents of String arrays S1 and S2 in alternate fashion into destination String array S3. Alternatively one String from S1 then one String from S2 and so on should be Stored into S3. |

### Code:

|  |
| --- |
| **import** java.util.Arrays;  **public** **class** asda {  **public** **static** **void** main(String as []) {  String s1[]= {"HELLO","I'M","HUMAN"};  String s2[]= {"HELLO","I'M","AN","ANIMAL"};    *merge*(s1,s2);  }  **static** **void** merge(String[] s1,String []s2) {  **int** size1=s1.length;  **int** size2=s2.length;  **int** i=0,j=0,k=0;  String s3[] = **new** String [size1+size2];  **while**(i<size1 && j<size2) {  s3[k]=s1[i];  k++;  s3[k]=s2[j];  i++;  j++;  k++;    }  **while**(i<size1) {  s3[k]=s1[i];  i++;  k++;  }  **while**(j<size2) {  s3[k]=s2[j];  j++;  k++;  }  System.***out***.println(Arrays.*toString*(s3));  }  } |

**Output:**

|  |
| --- |
| [HELLO, HELLO, I'M, I'M, HUMAN, AN, ANIMAL] |

**Experiment No: 6.7**

**Aim:**

|  |
| --- |
| Write a program to search a name present in a String array. Also print if name not found. |

**Code:**

|  |
| --- |
| **import** java.util.\*;  **public** **class** qwerty {  **public** **static** **void** main(String as[]){  String array[]= {"HELLO","WECOME","TO","You"};  *searchName*(array);  }  **static** **void** searchName(String [] as) {  Scanner ip= **new** Scanner (System.***in***);  System.***out***.println("Enter string");  String s1=ip.next();  **boolean** found=**false**;  **int** i;  **for** (i=0;i<as.length;i++) {  String buffer=as[i];  **if** (buffer.equals(s1)) {  found=**true**;  **break**;  }  }  **if**(found) {  System.***out***.println("FOUND");  }  **else** {  System.***out***.println("NOT FOUND");  }  }  } |

**Output:**

|  |
| --- |
| Enter string  HELLO  FOUND |

**Experiment No: 6.8**

**Aim:**

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| --- |
| Write a program to delete a name present in a String array and create another String array containing those names which are not deleted. |

**Code:**

|  |
| --- |
| import java.util.Arrays;  import java.util.Scanner;  public class qwee {  public static void main(String asp[]) {  String as[]= {"aaa","bbb","ccc","ddd","eee","ffff"};  Scanner oi=new Scanner(System.in);  String s3[]=new String[as.length-1];  System.out.println("Enter the name to be deleted");  String a= oi.next();  String s2=new String();  int size=as.length;  int i,k=0;  for (i=0;i<size;i++) {  if (a.equals(as[i])) {  as[i]=null;  }}  for(int j=0;j<size;j++) {    if (as[j]!=null) {  s3[k]=as[j];  k++;  }  }  System.out.println(Arrays.toString(as));  System.out.println(Arrays.deepToString(s3));  }  } |

**Output:**

|  |
| --- |
| Enter the name to be deleted  bbb  [aaa, null, ccc, ddd, eee, ffff]  [aaa, ccc, ddd, eee, ffff] |

**Experiment No: 6.9**

**Aim:**

|  |
| --- |
| Write a program to implement the following logic. There are two String arrays, one named Appeared which contains names of all candidates appeared for an interview. Another String array named NotSelected contains names of those candidates who could not make through that interview. Create a third String array named Selected which should contain the names of all those candidates who got selected in the interview. |

**Code:**

|  |
| --- |
| **import** java.util.Arrays;  **public** **class** qweqwe {  **public** **static** **void** main(String as []) {  String appeared []= {"aaa","bbb","ccc","ddd","eee","jjj"};  String notSelected []= {"aaa","bbb","ddd"};  **int** size=(appeared.length)-(notSelected.length);  String selected[] = **new** String [size];  **int** i=0,j=0;  **for** (;i<appeared.length;i++) {  **int** flag=1;  **for**(**int** k=0;k<notSelected.length;k++) {  **if** (appeared[i].equals(notSelected[k])){  flag=0;  **break**;  }  }  **if** (flag==1) {  selected[j]=appeared[i];  j++;  }  }  System.***out***.println("Selected candiadtes are \n"+Arrays.*toString*(selected));  }  } |

**Output:**

|  |
| --- |
| Selected candiadtes are  [ccc, eee, jjj] |

**Experiment No: 6.10**

**Aim:**

|  |
| --- |
| Write a program to remove duplicate names present in a String array named AllNames and create another String array to store the unique names and name the String array as NoDuplicates. |

**Code:**

|  |
| --- |
| **import** java.util.Arrays;  **public** **class** qwertyu {  **public** **static** **void** main(String as []) {  String allnames[]= {"aaa","aaa","bbbb","ccc","ddd","ccc","aaa","kkk"};  String noDuplicates[]=**new** String[allnames.length];  **int** i,j,k=0;  **for**(i=0;i<allnames.length;i++) {  **boolean** flag=**true**;  **for**(j=0;j<noDuplicates.length;j++) {  **if**(allnames[i]==noDuplicates[j]) {  flag=**false**;  }  }  **if**(flag==**true**) {  noDuplicates[k]=allnames[i];  k++;  }  }  System.***out***.println("Original string array:\n"+Arrays.*toString*(allnames));  System.***out***.println(Arrays.*toString*(noDuplicates));  }  } |

**Output:**

|  |
| --- |
| 8  Original string array:  [aaa, aaa, bbbb, ccc, ddd, ccc, aaa, kkk]  [aaa, bbbb, ccc, ddd, kkk, null, null, null] |