ASSIGNMENT 1
SET-A
Q.1 Write a java Program to check whether given number is Prime or Not.
Ans:

```
import java.util.Scanner;
class CheckPrime{
public static void main(String []para)
{
Scanner scan=new Scanner(System.in);
 System.out.println("Enter the Number :");
 int num=scan.nextInt();
 if(num>1){
 if(num%2!=0){
 System.out.print("Given number is Prime.");
 }
 else{
 System.out.print("Given number is not Prime.");
 }
 }
}
}
```

Output:
ASSIGNMENT 1
SET-A
Q.2 Write a java Program to display all the perfect numbers between 1 to n.
Ans:

```
class Q2{
public static void main(String []para)
{
int n=100;
 for(int i=1;i<=n;i++){
 int sum=0;
 for(int j=1;j<i;j++){
 if(i%j==0){
 sum+=j;
 }
 }
 if(sum==i){
 System.out.println(i);
 }
} }
}
```

Output:
ASSIGNMENT 1
SET-A
Q.3 Write a java Program to accept employee name from a user and display it in reverse order.
Ans:

```
import java.util.*;
class Q3{
public static void main(String[] para)
```

ASSIGNMENT 1
SET-C
Q.1 Write a java program to count the frequency of each character in a given string.
Ans:

```
public class Q1
{
 public static void main(String[] args) {
 String str = "Jay Mahakal";
 int[] freq = new int[str.length()];
 int i, j;
```

```
 char string[] = str.toCharArray();

 for(i = 0; i <str.length(); i++) {
 freq[i] = 1;
 for(j = i+1; j <str.length(); j++) {
 if(string[i] == string[j]) {
 freq[i]++;
 string[j] = '0';
 }
 }
 }

 System.out.println("Characters and their corresponding frequencies");
 for(i = 0; i <freq.length; i++) {
 if(string[i] != ' ' && string[i] != '0')
 System.out.println(string[i] + "-" + freq[i]);
 }
 }
}
```

Output:

ASSIGNMENT 1

SET-C

Q.2 Write a java program to display each word in reverse order from a string array.

Ans:

```
class Q2{
public static void main(String[] args) {
String str;
String revstr="";
char ch;
str=new String("I am GT");
for(int i=0;i<str.length();i++){
ch=str.charAt(i);
revstr=ch+revstr;
}
System.out.println("Original String is :"+str);
System.out.println("Reversed String is :"+revstr);
}
}
```

Output:

ASSIGNMENT 1

SET-C

Q.3 Write a java program for union of two integer array.

Ans:

```
class Q3{
public static void main(String[] args) {
int[] arr= {1,3,5,8};
int[] arr2={2,4,6,7};
int x=arr.length;
int y=arr2.length;
System.out.println("Union of arr and arr2 is : ");
union(arr,arr2,x,y);
}
public static void union(int[] arr,int[] arr2,int x,int y){
int i=0,j=0;
while(i<x && j<y){
if(arr[i]<arr2[j]){
System.out.println(arr[i++]+" ");
}
else if(arr[i]>arr2[j]){
```

```
System.out.println(arr2[j++]+" ");
}
else{
System.out.println(arr[i++]+" ");
j++;
}
}
while(i<x){
System.out.println(arr[i++]+" ");
}
while(j<y){
System.out.println(arr2[j++]+" ");
}
}
}
```

Output:

ASSIGNMENT 1

SET-C

Q.4 Write a java program to display transpose of given matrix.

Ans:

```
class Q4{
public static void main(String args[]){
int original[][]={{1,3,4},{2,4,3},{3,4,5}};
int transpose[][]=new int[3][3]; //3 rows and 3 columns

for(int i=0;i<3;i++){
for(int j=0;j<3;j++){
transpose[i][j]=original[j][i];
}
}

System.out.println("Original Matrix:");
for(int i=0;i<3;i++){
for(int j=0;j<3;j++){
System.out.print(original[i][j]+" ");
}
System.out.println();
}
System.out.println("Matrix After Transpose:");
for(int i=0;i<3;i++){
for(int j=0;j<3;j++){
System.out.print(transpose[i][j]+" ");
}
System.out.println();
}
}}
```

Output:

ASSIGNMENT 1

SET-C

Q.5 Write a java program to display alternate character from a given string.

Ans:

```
import java.util.Scanner;
class Q5{
 public static void main(String args[]){
 Scanner scan=new Scanner(System.in);

 try {
 System.out.print("Enter String : ");
 String str = scan.nextLine();
 for(int i=0;i<str.length();i+=2) {
```

```
System.out.print(" " + str.charAt(i));
}
} catch (Exception e) {}
}
```