Chapter 6 Practice Set Questions by Munawar

Questions

1. Create an array of 5 floats and calculate their sum.

Solution

```
//Question 1
  float [] marks={34.f,55,76.3f,99.9f};
  float sum=0;
  for (float element:marks) {
      sum=sum+element;
  }
  System.out.println("The value of sum is  "+sum);
```

2. Write a program to find out whether a given integer is present in an array or not.

Solution

```
//Question 2
int [] mark={34,55,76,99};
Scanner sc=new Scanner(System.in);
System.out.println("Enter the number please that you want to check :");
int num=sc.nextInt();
boolean isInArray=false;
for (int element:mark) {
 if (num==element){
     isInArray=true;
     break;
 }
}
if(isInArray) {
    System.out.println("The value is present in array");
}
else {
    System.out.println("The value is not present in array");
}
```

3. Calculate the average marks from an array containing marks of are students in physics using for loop.

Solution

```
//  Question 3
  float [] std_marks={34.f,55,76.3f,99.9f};
  float sum=0;
  for (float element:std_marks) {
      sum=sum+element;
  }
  System.out.println("The value of average marks is  "+sum/std_marks.length);
```

4. Write a program to add two matrices of size 2X3.

Solution

```
        // Question 4
        int [] [] matric1={{1,2,3},{5,6,7}};
        int [] [] matric2={{2,4,6},{8,10,12}};

        int [][] result={{0,0,0},{0,0,0}};
//        for(int i=0;i<matric1.length;i++){    // row number of times
//            for(int j=0;j<matric1[i].length;j++){  // column number of time
//                System.out.format("Setting value fori=%d and j=%d \n",i,j);
//                result[i][j]=matric1[i][j]+matric2[i][j];

        for (int i=0;i<matric1.length;i++){
            for(int j=0;j<matric1[i].length;j++){  //column of times
                System.out.print(result[i][j]+" ");
                result[i][j]=matric1[i][j]+matric2[i][j];}
            System.out.println(" ");
        }
```

5. Write a program to reverse an array.

Solution

```
        // Question 5
//        float a=Math.floorDiv(5,2);
//        System.out.println(a);
        int [] arr={1,2,3,4,5,6,7};
        int l=arr.length;
        int temp;
        int n=Math.floorDiv(l,2);
        System.out.print("Before Reverse :");
        for (int element:arr){

            System.out.print(element+" ");
        }
        System.out.println("");
```

```
        for (int i=0;i<n;i++){
            //swap a[i] a [a-l-1-i]
            // a b temp
            //[][4][3]
            temp=arr[i];
            arr[i]=arr[l-1-i];
            arr[l-1-i]=temp;

        }
        System.out.print("After Reverse  :");
        for (int element: arr){
            System.out.print(element+" ");
        }
```

6. Write a program to find maximum number of element in an array.

Solution

```
// Question 6
int [] maxArr={1,2,3,4,6,7,10,15,20,35};
int maximum=0;
for(int element:maxArr){
    if(element>maximum){
        maximum=element;
    }
}

System.out.println("The value of the Maximum element of an array is :
"+maximum);
```

7. Write a program to minimum number of element in an array.

Solution

```
// Question 7
int [] minArr={1,2,3,4,6,7,10,15,20,35};
int min=35;
int newMax=Integer.MAX_VALUE;
int newMin=Integer.MIN_VALUE;
for(int e:minArr){
    if(e<min){
        min=e;
    }
}

System.out.println("The value of the minimum element of an array is : "+min);
```

8. What can be done using one type of loop can also be done using the other two types of loops True or False.

Solution

Answer is true.

9. Write a program to find the whether an array is sorted or not.

Solution

```
// Question 8
int [] sortArr={1,3,5,7,8,9};
boolean isSorted=true;
for(int i=0;i<sortArr.length-1;i++){
    if(sortArr[i]>sortArr[i+1]){
        isSorted=false;
        break;
    }
}
if(isSorted){
    System.out.println("The array is sorted:");
}
else {
    System.out.println("The give array is not sorted");
}
```

Source code:

```
import java.util.Scanner;
public class Main {
    public static void main(String[] args) {
      //Question 1
//        float [] marks={34.f,55,76.3f,99.9f};
//        float sum=0;
//        for (float element:marks) {
//            sum=sum+element;
//        }
//        System.out.println("The value of sum is  "+sum);

//        //Question 2
//        int [] mark={34,55,76,99};
```

```
//        Scanner sc=new Scanner(System.in);
//        System.out.println("Enter the number please that you want to check
:");
//        int num=sc.nextInt();
//        boolean isInArray=false;
//        for (int element:mark) {
//         if (num==element){
//             isInArray=true;
//             break;
//         }
//        }
//        if(isInArray) {
//            System.out.println("The value is present in array");
//        }
//        else {
//            System.out.println("The value is not present in array");
//        }


      //  Question 3
        float [] std_marks={34.f,55,76.3f,99.9f};
        float sum=0;
        for (float element:std_marks) {
            sum=sum+element;
        }
//        System.out.println("The value of average marks is
"+sum/std_marks.length);


//        // Question 4
//        int [] [] matric1={{1,2,3},{5,6,7}};
//        int [] [] matric2={{2,4,6},{8,10,12}};
//
//        int [][] result={{0,0,0},{0,0,0}};
////        for(int i=0;i<matric1.length;i++){   // row number of times
////            for(int j=0;j<matric1[i].length;j++){  // column number of
time
////                System.out.format("Setting value fori=%d and j=%d
\n",i,j);
////                result[i][j]=matric1[i][j]+matric2[i][j];
//
//        for (int i=0;i<matric1.length;i++){
//            for(int j=0;j<matric1[i].length;j++){  //column of times
//                System.out.print(result[i][j]+" ");
//                result[i][j]=matric1[i][j]+matric2[i][j];}
//            System.out.println(" ");
//        }



//        // Question 5
////        float a=Math.floorDiv(5,2);
////        System.out.println(a);
//        int [] arr={1,2,3,4,5,6,7};
//        int l=arr.length;
//        int temp;
//        int n=Math.floorDiv(l,2);
```

```
//         System.out.print("Before Reverse :");
//         for (int element:arr){
//
//             System.out.print(element+" ");
//         }
//         System.out.println("");
//
//         for (int i=0;i<n;i++){
//             //swap a[i] a [a-l-1-i]
//             // a b temp
//             //[][4][3]
//             temp=arr[i];
//             arr[i]=arr[l-1-i];
//             arr[l-1-i]=temp;
//
//         }
//         System.out.print("After Reverse  :");
//         for (int element: arr){
//             System.out.print(element+" ");
//         }


//         // Question 6
//         int [] maxArr={1,2,3,4,6,7,10,15,20,35};
//         int maximum=0;
//         for(int element:maxArr){
//             if(element>maximum){
//                 maximum=element;
//             }
//         }
//
//         System.out.println("The value of the Maximum element of an array is
: "+maximum);
//



//         // Question 7
//         int [] minArr={1,2,3,4,6,7,10,15,20,35};
//         int min=35;
//         int newMax=Integer.MAX_VALUE;
//         int newMin=Integer.MIN_VALUE;
//         for(int e:minArr){
//             if(e<min){
//                 min=e;
//             }
//         }
//
//         System.out.println("The value of the minimum element of an array is
: "+min);



        // Question 8
        int [] sortArr={1,3,5,7,8,9};
        boolean isSorted=true;
        for(int i=0;i<sortArr.length-1;i++){
```

```
            if(sortArr[i]>sortArr[i+1]){
                isSorted=false;
                break;
            }
        }
        if(isSorted){
            System.out.println("The array is sorted:");
        }
        else {
            System.out.println("The give array is not sorted");
        }
    }

}
```

Thank You