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Assignment for arrays

Exercise 1
Random car digit number

```java
package array_assignments;

import java.util.Arrays;
import java.util.Random;

public class RandomCarDigitNumber {
    /*
    Random car digit numberWrite a program to print random & unique
car digit number•Take input  from user for number of unique car
number to generate•Take format of card number to be
    MH{Random4digits}: MH3459•Make sure number generated are not
duplicate
     */
    public static void main(String[] args) {
        String[] carNumber=new String[5];
        String index;
        Random random = new Random();

        for(int i=0;i<5;i++) {
            //MH{Random4digits}
            index = String.format("%04d", random.nextInt(10000));
            index="MH"+index;
            //MH3459•Make sure number generated are not duplicate
            boolean test = Arrays.asList(carNumber)
                    .contains(index);
            if(!test) {
                carNumber[i] = index;
                System.out.println(carNumber[i]);
            }
        }

    }
}
```

Exercise 2

Day of the Week

```
package array_assignments;

import java.util.Scanner;

public class DayOfTheWeek {
    /*
    Day of the Week1.Make array that holds textual value of days like
"Monday, Tuesday etc2.
    Let use input corresponding day3.
    Program should output String that represent day and you can
assume week start Monday
    Example: User input 1: Output: Monday
     */

    public static void main(String[] args) {
        String
daysOfWeek[]={"Monday","Tuesday","Wednesday","Thursday","Friday","
Saturday","Sunday"};
        Scanner scanner=new Scanner(System.in);
        System.out.println("Enter the day number for which you want
to display the Day in String");
        int dayNum=scanner.nextInt();
        if(dayNum<=0 || dayNum>7)
            System.out.println("Entered day number is not valid!!
day should be between 1 to 7");
        else
        {
            System.out.println(daysOfWeek[dayNum-1]);
        }
    }
```

Exercise 3:

```
package array_assignments;
import java.util.Scanner;
public class GradesAvgMinMax {
    /*
    Write a program that allows user to enter number of grades(out
off 100)
```

```java
    and provide them with their average,highest & lowest
scoreExample:
    Number of grades : 4 User enters: 50, 78, 69,55 Average : 63
Highest: 78 Lowest : 50
     */
    public static void main(String[] args) {
        double avgGrade=0,sum=0;
        int minGrade=0,maxGrade=0,flag=0;
        Scanner scanner=new Scanner(System.in);
        System.out.println("Enter number of grades: ");
        int numberOfGrades=scanner.nextInt();

        int[] grades=new int[numberOfGrades];
        System.out.println("Enter "+numberOfGrades+" Grades: ");
        for(int i=0;i<numberOfGrades;i++)
        {
            int g=scanner.nextInt();
            if(g>=0 && g<=100){
                grades[i]=g;
                sum = sum + grades[i];
            }
            else {
                System.out.println("Your entered value is not
valid, should be out of 100 ");

                flag=1;
                break;
            }
        }
        if(flag==0) {
            avgGrade = sum / numberOfGrades;
            System.out.println("Average of " + numberOfGrades + "
entered grades is : " + String.format("%.2f", avgGrade));
            minGrade = grades[0];
            maxGrade = grades[0];
            for (int i = 0; i < numberOfGrades; i++) {
                if (grades[i] < minGrade)
                    minGrade = grades[i];
                if (grades[i] > maxGrade)
                    maxGrade = grades[i];
            }

            System.out.println("Highest grade is: " + maxGrade);
            System.out.println("Lowest grade is: " + minGrade);
        }
    }
}
```