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OOP (2CSE303)

Date
Page 1

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(1) Given :-

Player	1	2	3	4	5	6	7	8	9	10	11
No. of Runs	40	54	100	79	121	30	12	11	6	99	80

Sol^{n} • code :-

```
import java.util.Arrays;
public class Questns {
    public static void main (String[] args)
    {
        int [] runs = new int [] {40, 54, 100, 79, 121, 30, 12,
                                  11, 6, 99, 80};
        Arrays.sort (runs);

        int max-length = runs.length;

        System.out.println ("Highest runs scored by
            player is " + runs [max-length-1]);

        System.out.println ("Lowest runs scored by
            player is " + runs [0]);

    }
```

Expected Output :-

Highest runs scored by player is 121.
Lowest runs scored by player is 6.

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(2) - The concept of automated memory managment in Java is called Garbage collection.
- It is process of destroying the unused and unrefered objects.
- Garbage collection makes java more efficient than other programming. by removing unrefered objects from Heap memory.
- It is done automatically in Java.
- Garbage collector is a part of Java virtual machine (JVM).

- Garbage collector does not work on stack memory. It works on Heap memory.

Eg:- public class Ques2 {
public void finalize() {
System.out.println("Garbage collected");
}
public static void main (String[] args)
{
Ques2 s1 = new Ques2();
Ques2 s2 = new Ques2();

s1 = null;
s2 = null;
System.gc();
}
}

Q3

```
import java.util.Scanner;

public class Question3 {
    public static void main (String[] args)
    {
        float celsius, kelvin;
        int ch;

        System.out.println("\n1. Celsius to kelvin
            \n2. kelvin to Celsius
            \n\nEnter your choice: ");

        Scanner sc = new Scanner(System.in);
        ch = sc.nextInt();

        switch(ch)
        {
        case '1':
        System.out.println("\nEnter Celsius value: ");
        celsius = sc.nextFloat();
        ~~ConvertTokelvin(celsius);~~
        System.out.println("Answer in Kelvin=" +
                            ConvertTokelvin(celsius));
        exit(0);
        case '2':
        System.out.println("\nEnter kelvin value: ");
        kelvin = sc.nextFloat();
        System.out.println("\nAnswer in Celsius=" +
                            ConvertToCelsius(kelvin));
```

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```
            exit(0);

        default:
        System.out.println("Invalid Input");
        break;
        }
    }

public static float ConvertToKelvin(float celsius)
    {
        return (float)(celsius + 273.15);
    }

public static float ConvertToCelsius(float kelvin)
    {
        return (float)(kelvin - 273.15);
    }
}
/* end of code */
```

⇒ The main method is always considered as static in java as a static method can be called without creating the object of main method.