Rajalakshmi Engineering College

Name: Sunetra B
Email: 241801282@rajalakshmi.edu.in
Roll no: 241801282
Phone: 9150958405
Branch: REC
Department: AI & DS - Section 5
Batch: 2028
Degree: B.E - AI & DS

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2024_28_III_OOPS Using Java Lab

REC_2028_OOPS using Java_Week 10_MCQ

Attempt : 1
Total Mark : 15
Marks Obtained : 15

Section 1 : MCQ

1. Which statement is true about HashSet and TreeSet?

Answer

TreeSet provides sorted elements

Status : Correct ***Marks : 1/1***

2. Which of the following is true about HashMap?

Answer

It is not synchronized

Status : Correct ***Marks : 1/1***

3. What will be the output of the following code?

```
import java.util.*;
class Main {
   public static void main(String[] args) {
      HashMap<String, String> map = new HashMap<>();
      map.put("A", "Apple");
      map.put("B", "Banana");
      map.put("C", "Cherry");
      map.replace("B", "Blueberry");
      System.out.println(map);
   }
}
```

Answer

{A=Apple, B=Blueberry, C=Cherry}

Status : Correct ***Marks : 1/1***

4. What happens if two keys have the same hash code in a HashMap?

Answer

A linked list is used to store values with the same hash

Status : Correct ***Marks : 1/1***

5. What is the time complexity of retrieving an element from a HashSet?

Answer

O(1)

Status : Correct ***Marks : 1/1***

6. What will be the output of the following code?

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

```
        HashMap<String, Integer> map = new HashMap<>();
        map.put("X", 10);
        map.put("Y", 20);
        map.put("Z", 30);
        map.remove("Y");
        System.out.println(map);
    }
}
```

Answer

{X=10, Z=30}

Status : Correct ***Marks : 1/1***

7. What will happen if you add elements in descending order in a TreeSet?

Answer

They are sorted in ascending order

Status : Correct ***Marks : 1/1***

8. Which of the following allows null keys in Java?

Answer

HashMap

Status : Correct ***Marks : 1/1***

9. How does HashSet check for duplicate elements?

Answer

Using equals() and hashCode()

Status : Correct ***Marks : 1/1***

10. Which method retrieves the lowest key in a TreeMap?

Answer

firstKey()

Status : Correct ***Marks : 1/1***

11. Which method removes all elements from a Set?

Answer

clear()

Status : Correct ***Marks : 1/1***

12. Which of the following is true about TreeMap?

Answer

It maintains natural ordering

Status : Correct ***Marks : 1/1***

13. What happens when you add duplicate elements to a HashSet?

Answer

The duplicate is ignored

Status : Correct ***Marks : 1/1***

14. What will happen if you add a null element to a TreeSet?

Answer

An exception occurs

Status : Correct ***Marks : 1/1***

15. What will be the output of the following code?

```
import java.util.*;
```

```
class Main {
    public static void main(String[] args) {
        HashMap<String, Integer> map = new HashMap<>();
        map.put("A", 1);
        map.put("B", 2);
        map.put("C", 3);
        System.out.println(map.containsKey("B"));
    }
}
```

Answer

true

Status : Correct ***Marks : 1/1***

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2024_28_III_OOPS Using Java Lab

REC_2028_OOPS using Java_Week 9_MCQ

Attempt : 1
Total Mark : 15
Marks Obtained : 15

Section 1 : MCQ

1. What will be the output of the following code?

```
import java.util.*;
class Main {
   public static void main(String[] args) {
      ArrayList<Integer> list = new ArrayList<>();
      list.add(10);
      list.add(20);
      list.add(30);
      list.remove(1);
      System.out.println(list);
   }
}
```

Answer

[10, 30]

Status : Correct ***Marks : 1/1***

2. What will be the output of the following code?

```
import java.util.*;
class Main {
   public static void main(String[] args) {
      ArrayList<String> list = new ArrayList<>();
      list.add("apple");
      list.add("banana");
      list.add("cherry");
      list.add("banana");
      System.out.println(list.lastIndexOf("banana"));
   }
}
```

Answer

3

Status : Correct ***Marks : 1/1***

3. What is the correct way to create an ArrayList in Java?

Answer

ArrayList<String> list = new ArrayList<>();

Status : Correct ***Marks : 1/1***

4. How can you access the first element of an ArrayList named as list?

Answer

list.get(0);

Status : Correct ***Marks : 1/1***

5. What will be the output of the following code?

```
import java.util.*;
public class Main {
    public static void main(String[] args) {
        Stack<Integer> s = new Stack<>();
        s.push(10);
        s.push(20);
        s.push(30);
        System.out.println(s.peek());
    }
}
```

Answer

30

Status : Correct ***Marks : 1/1***

6. What will be the output of the following code?

```
import java.util.ArrayList;

public class Main {
    public static void main(String[] args) {
        ArrayList<Integer> list = new ArrayList<>();
        list.add(10);
        list.add(20);
        list.add(30);
        System.out.println("Size of the list: " + list.size());
    }
}
```

Answer

Size of the list: 3

Status : Correct ***Marks : 1/1***

7. What will be the output of the following code?

```
import java.util.*;
```

```
class Main {
    public static void main(String[] args) {
        ArrayList<Integer> list = new ArrayList<>();
        list.add(1);
        list.add(2);
        list.add(3);
        list.add(4);
        list.set(2, 10);
        System.out.println(list);
    }
}
```

Answer

[1, 2, 10, 4]

Status : Correct ***Marks : 1/1***

8. What does the addFirst() method of LinkedList do?

Answer

Adds an element to the beginning of the list

Status : Correct ***Marks : 1/1***

9. What is Collection in Java?

Answer

A group of objects

Status : Correct ***Marks : 1/1***

10. What will be the output of the following code?

```
import java.util.ArrayList;

public class Main {
    public static void main(String[] args) {
        ArrayList<String> list = new ArrayList<>();
```

```
        list.add("Apple");
        list.add("Banana");
        list.remove("Apple");
        System.out.println(list);

    }
}
```

Answer

[Banana]

Status : Correct ***Marks : 1/1***

11. Which method is used to add an element to the top of the stack?

Answer

push()

Status : Correct ***Marks : 1/1***

12. Which of the following methods removes and returns the last element from a LinkedList?

Answer

removeLast()

Status : Correct ***Marks : 1/1***

13. What will be the output of the following code?

```
import java.util.*;
public class Main {
    public static void main(String[] args) {
        Stack<Integer> stack = new Stack<>();
        for (int i = 1; i <= 3; i++)
            stack.push(i * 2);
        stack.pop();
        stack.push(10);
```

```
        System.out.println(stack.peek());
    }
}
```

Answer

10

Status : Correct ***Marks : 1/1***

14. What will be the output of the following code?

```
import java.util.*;
class Main {
    public static void main(String[] args) {
        ArrayList<String> list = new ArrayList<>();
        list.add("Java");
        list.add("Python");
        list.add("Java");
        list.add("C++");
        System.out.println(list.indexOf("Java"));
    }
}
```

Answer

0

Status : Correct ***Marks : 1/1***

15. What will be the output of the following code?

```
import java.util.*;
class Main {
    public static void main(String[] args) {
        ArrayList<Integer> list = new ArrayList<>();
        list.add(1);
        list.add(2);
        list.add(3);
        list.add(4);
        list.add(5);
```

```
        System.out.println(list.get(3));
    }
}
```

Answer

4

Status : Correct ***Marks : 1/1***