

Task 1

The screenshot shows an IDE with a Java program on the left and its output on the right. The Java program is a simple class named `Check` with a `main` method. It creates a character array `arr_ch` containing the characters 'H', 'e', 'l', 'l', 'o', ' ', 'W', 'o', 'r', 'l', 'd', '!', and then creates a `String` object `st` from this array and prints it. The output window on the right shows the path `"C:\Program Files\Java\jdk1.8.0_11"`, the text `HelloWorld!`, and the message `Process finished with exit code 0`. The IDE interface includes a toolbar with icons for navigation and execution.

```
no usages
public class Check
{
    no usages
    public static void main(String[] args)
    {
        char arr_ch[]={'H','e','l','l','o',' ','W','o','r','l','d','!'};

        String st=new String(arr_ch);

        System.out.println(st);
    }
}
```

"C:\Program Files\Java\jdk1.8.0_11"

HelloWorld!

Process finished with exit code 0

Task 2

The screenshot displays a Java IDE with a dark theme. On the left, the source code for a class named `task2` is visible. The code prompts the user to enter a string and then counts the occurrences of the character 'A' (both uppercase and lowercase). The code uses a `Scanner` for input and a `for` loop to iterate through the string characters. The output shows the count of 'A's in the input string "Hello My Name Is Muhammad Younis".

```
no usages
public class task2
{
    no usages
    public static void main(String[] args) {
        Scanner input=new Scanner(System.in);

        System.out.println("type any String ");
        String st=input.nextLine();
        int count=0;

        for (int i=0; i<st.length(); i++)
        {
            if ('a'== st.charAt(i)|| 'A'== st.charAt(i))
            {
                count++;
            }
            else
            {
                continue;
            }
        }

        System.out.println("Number of 'A' in your String is "+count);
    }
}
```

On the right side of the IDE, the output window shows the execution results:

```
"C:\Program Files\Java\jdk1.8.0_111
type any String
Hello My Name Is Muhammad Younis
Number of 'A' in your String is 3

Process finished with exit code 0
```

Task 3

```
no usages
public class task3 {
    no usages
    public static void main(String[] args) {

        String st="Lazy fox is Jumping";

        for (int i=0; i<st.length(); i++)
        {
            if ('i'==st.charAt(i))
            {
                System.out.println("The Character 'i' Is At Index : "+i );
            }
        }
    }
}
```

"C:\Program Files\Java\jdk1.8.0_111\
The Character 'i' Is At Index : 9
The Character 'i' Is At Index : 16
Process finished with exit code 0

Task 4

```
no usages
public class task4 {
    no usages
    public static void main(String[] args) {

        String st="Brown";
        char store;

        for (int i=st.length()-1; i>=0; --i)
        {
            store=st.charAt(i);
            System.out.print(store);
        }
    }
}
```

"C:\Program Files\Java\jdk1.8.0_111\
nworB
Process finished with exit code 0

Task 5

```
import java.util.Random;
import java.util.Scanner;

no usages
public class task5
{
    no usages
    public static void main(String[] args) {
        Random random=new Random();

        int num=0;

        num=random.nextInt(5)+1;

        System.out.println("You rolled a "+num);
    }
}
```

```
"C:\Program Files\Java\jdk1.8.0_111\bin
You rolled a 2

Process finished with exit code 0
```

Task 6

```
    double cache=4.3d;
    return cache;
}

3 usages
static class Ram
{
    no usages
    static double memory=4;
    no usages
    static String manucaturer="Dell";
    1 usage
    static double getClockspeed()
    {
        double Clockspeed=5.5d;
        return Clockspeed;
    }
}

no usages
public class task6 {
    no usages
    public static void main(String[] args) {
        CPU cpu=new CPU();
        CPU.Ram ram=new CPU.Ram();
        CPU.Processor processor=cpu.new Processor();

        System.out.println("Cache : "+processor.GetCache());
        System.out.println("ClockSpeed : " + CPU.Ram.getClockspeed());
    }
}
```

```
"C:\Program Files\Java\jdk1.8.0_111\bin
Cache : 4.3
ClockSpeed : 5.5

Process finished with exit code 0
```