

Intro

1. Hello World – post/past Increment – Type Casting

```
1 package intro;
2
3 public class HelloWorld {
4
5     public static void main( String[] gs) {
6         System.out.println("Hellowrold");
7
8         // post and past increment
9         int b = 45 ;
10        int d = b++; // b value is assigned to d and then b value is incremented, so d =45 and b =46 he
11        System.out.print(d+ " "+ b);
12        System.out.println();
13
14
15        int a = 45 ;
16        int c = ++a; // a value will be first incremented and then will be assigned to c, so c = 46 and
17        System.out.print(c+ " "+ a);
18        System.out.println();
19
20        // TypeCasting
21        // Automatic TC byte->short->char->int->long->float->double ...
22        // going reverse will be Manual TC.
23
24        byte x = 4;
25        int y = x;
26        System.out.println(y); // it should print 4 without errors. since it is following the above serie
27
28        // double l = 3.14;
29        // int m = l; // this will give the error since not following the above series and had to do the m
30        // System.out.println(y);
31
32        // doing the manual TC...
33        double p = 3.14;
34        int q = (int)p ;
35        System.out.println(q); // it should print 3.
36    }
37 }
38
```

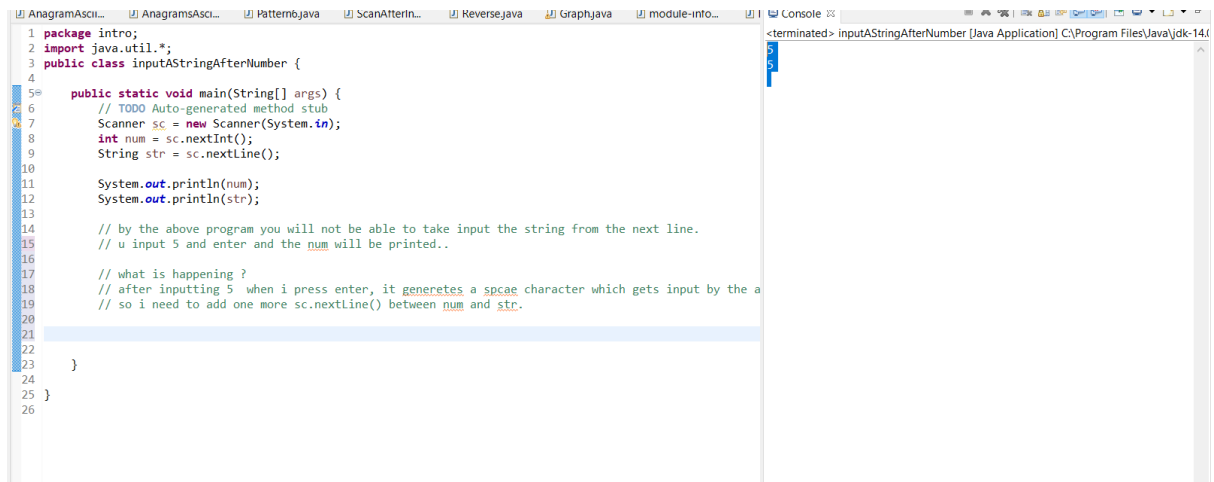
```
<terminated> HelloWorld [Java Application] C:\Program Files\Java\jdk-14.0.2\bin
Hellowrold
45 46
46 46
4
3
```

2. Calculate SI.

```
1 package intro;
2
3 import java.util.*;
4
5 public class calculateSi {
6
7     public static void main(String[] args) {
8         // TODO Auto-generated method stub
9         Scanner sc = new Scanner(System.in);
10
11        int P = sc.nextInt();
12        float R = sc.nextFloat(); // if want to initialize append a f at last => eg rate =12.1f;
13        int time = sc.nextInt();
14
15        float simpleInterest = P*R*time/100;
16
17        System.out.println("the simple intertst is " + simpleInterest);
18    }
19 }
20
21 }
22
```

```
<terminated> calculateSi [Java Application] C:\Program Files\Java\jdk-14.0.2\bin\javaw.e
5000
12.5
12
the simple intertst is 7500.0
```

3. Input A String After A number



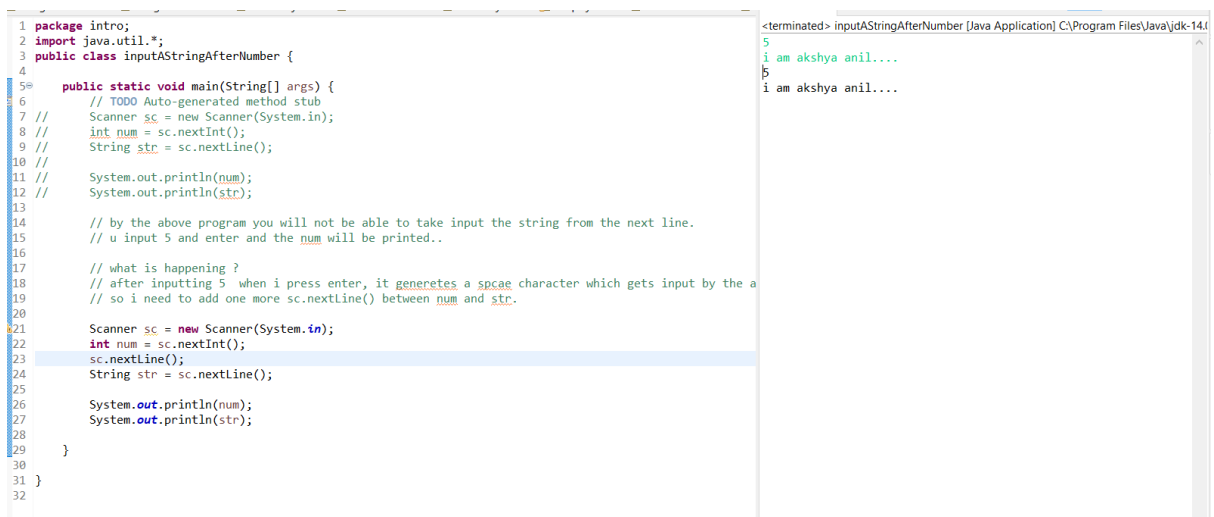
The screenshot shows an IDE with a Java file named `inputAStringAfterNumber.java`. The code is as follows:

```
1 package intro;
2 import java.util.*;
3 public class inputAStringAfterNumber {
4
5     public static void main(String[] args) {
6         // TODO Auto-generated method stub
7         Scanner sc = new Scanner(System.in);
8         int num = sc.nextInt();
9         String str = sc.nextLine();
10
11         System.out.println(num);
12         System.out.println(str);
13
14         // by the above program you will not be able to take input the string from the next line.
15         // u input 5 and enter and the num will be printed..
16
17         // what is happening ?
18         // after inputting 5 when i press enter, it generates a space character which gets input by the a
19         // so i need to add one more sc.nextLine() between num and str.
20
21
22     }
23 }
24
25
26
```

The console output shows the program has terminated with the following message:

```
<terminated> inputAStringAfterNumber [Java Application] C:\Program Files\Java\jdk-14.0.2\bin\java.exe
5
```

Implementing



The screenshot shows the same IDE with the Java file `inputAStringAfterNumber.java`. The code is now implemented with the following changes:

```
1 package intro;
2 import java.util.*;
3 public class inputAStringAfterNumber {
4
5     public static void main(String[] args) {
6         // TODO Auto-generated method stub
7         Scanner sc = new Scanner(System.in);
8         int num = sc.nextInt();
9         String str = sc.nextLine();
10
11         System.out.println(num);
12         System.out.println(str);
13
14         // by the above program you will not be able to take input the string from the next line.
15         // u input 5 and enter and the num will be printed..
16
17         // what is happening ?
18         // after inputting 5 when i press enter, it generates a space character which gets input by the a
19         // so i need to add one more sc.nextLine() between num and str.
20
21         Scanner sc = new Scanner(System.in);
22         int num = sc.nextInt();
23         sc.nextLine();
24         String str = sc.nextLine();
25
26         System.out.println(num);
27         System.out.println(str);
28     }
29 }
30
31
32
```

The console output shows the program has terminated with the following message:

```
<terminated> inputAStringAfterNumber [Java Application] C:\Program Files\Java\jdk-14.0.2\bin\java.exe
5
i am akshya anil....
5
i am akshya anil....
```

4. find the greatest of three numbers using ternary.

```
1 package intro;
2
3 public class greatestOfThreeNumbers {
4
5     public static void main(String[] args) {
6         // TODO Auto-generated method stub
7         int a = 10;
8         int b = 15;
9         int c = 25;
10        int result = a > b ? a > c ? a : c : b > c ? b : c ;
11        System.out.println(result);
12    }
13    // explanation:
14    // [ a > b ? (exp1) a > c ? a : c : (exp2) b > c ? b : c ] ....
15
16 }
17
```

Console

<terminated> greatestOfThreeNumbers [Java Application] C:\Program Files\Java\jdk-14.0.2\bin\javaw.exe (07-Jan-2021, 10:58:13 pm – 10:58:14 pm)

25

Program 5. Make a Calculator

```
1 package intro;
2 import java.util.*;
3 public class calculator {
4
5     public static void main(String[] args) {
6         // TODO Auto-generated method stub
7
8         Scanner sc = new Scanner(System.in);
9         while(true){
10
11             System.out.println("Enter two Numbers");
12             int a = sc.nextInt();
13             int b = sc.nextInt();
14
15             System.out.println("Enter Operations + , - , / or *....");
16             sc.nextLine();
17             char operation = sc.nextLine().charAt(0);
18
19             int result = 0;
20             switch (operation)
21             {
22                 case '+':
23                     result = a+b ; break;
24                 case '-':
25                     result = a-b ; break;
26                 case '/':
27                     result = a/b ; break;
28                 case '*':
29                     result = a*b; break;
30             }
31             System.out.println(result);
32         }
33     }
34 }
35 }
36
```

calculator [Java Application] C:\Program Files\Java\jdk-14.0.2\bin\javaw.exe (07-Jan-2021, 10:59:14 pm)

Enter two Numbers
5 25
Enter Operations + , - , / or *....
+
30
Enter two Numbers
5 35
Enter Operations + , - , / or *....
-
-30
Enter two Numbers
4 34
Enter Operations + , - , / or *....
*
136
Enter two Numbers
100 200
Enter Operations + , - , / or *....
/
0
Enter two Numbers