

```
1) public class AS6_Q1 {  
  
    public static void main(String[] args) {  
  
        int num = 10;  
  
        Integer Number = num;  
  
        System.out.println("By Autounboxing: " + Number);  
  
        Integer N2 = new Integer(num);  
  
        System.out.println("Using Constructor: " + N2);  
  
    } }  

```

```
2) public class AS6_Q2 {  
  
    public static void main(String[] args) {  
  
        float num = 25f;  
  
        Float Number = num;  
  
        System.out.println("By Autounboxing: " + Number);  
  
        Float N2 = new Float(num);  
  
        System.out.println("Using Constructor: " + N2);  
  
    } }  

```

```
3) public class AS6_Q3 {  
  
    public static void main(String[] args) {  
  
        double num = 50;  
  

```

```
Double Number = num;
```

```
System.out.println("By Autounboxing: "+Number);
```

```
Double N2 = new Double(num);
```

```
System.out.println("Using Constructor: "+N2);
```

```
} }
```

```
4) public class AS6_Q4 {
```

```
public static void main(String[] args) {
```

```
boolean b = true;
```

```
System.out.println("boolean to Boolean Object :");
```

```
Boolean Number = b;
```

```
System.out.println("By Autounboxing: "+Number);
```

```
Boolean N2 = new Boolean(false);
```

```
System.out.println("Using Constructor: "+N2);
```

```
} }
```

```
5) public class AS6_Q5 {
```

```
public static void main(String[] args) {
```

```
String num = "100";
```

```
Integer Number = new Integer(num);
```

```
System.out.println("The string was converted into an Integer Object having  
value :"+Number); } }
```

```
6) public class AS6_Q6 {  
    public static void main(String[] args) {  
        String num = "107f";  
        Float Number = new Float(num);  
        System.out.println("The string was converted into Float Object having value  
        :"+Number);  
    } }  

```

```
7) public class AS6_Q7 {  
    public static void main(String[] args) {  
        String num = "123.1938";  
        Double Number = new Double(num);  
        System.out.println("The String was converted into Double Object having value  
        :"+Number);  
    } }  

```

```
8) public class AS6_Q8 {  
    public static void main(String[] args) {  
        String val = "true";  
        Boolean Value = new Boolean(val);  

```

```
System.out.println("The string was converted into an Boolean Object having  
value :"+Value);  
} }
```

```
9) public class Q8_Q9 {  
    public static void main(String[] args) {  
        String num = "100";  
        String f_num = "10f";  
        String d_num = "20.1234";  
        String b = "true";  
        Integer N = Integer.valueOf(num);  
        Float FNum = Float.valueOf(f_num);  
        Double DNum = Double.valueOf(d_num);  
        Boolean Val = Boolean.valueOf(b);  
        System.out.println("String int to Integer Object converted with value :"+N);  
        System.out.println("String float to Float Object converted with value  
        :"+FNum);  
        System.out.println("String double to Double Object converted with value  
        :"+DNum);  
        System.out.println("String boolean to Boolean Object converted with value  
        :"+Val);
```

Q10. Write a program to design a simple calculator (only +, -, *, / operations).

The

calculator works as follows:

} }

```
10) import java.util.Scanner;
```

```
public class AS6_Q10 {
```

```
public static String simple_calc(String a, char c, String b) {
```

```
int n1 = Integer.valueOf(a);
```

```
int n2 = Integer.valueOf(b);
```

```
switch (c) {
```

```
case '+':
```

```
return "Add:" + (n1 + n2);
```

```
case '-':
```

```
return "Sub:" + (n1 - n2);
```

```
case '*':
```

```
return "Mul: " + n1 * n2;
```

```
default:
```

```
return "Div: " + n1 / n2;
```

```
}
```

```
}
```

```
public static void main(String[] args) {  
    Scanner sc = new Scanner(System.in);  
    String inp = sc.next();  
    char c = ' ';  
    String num1 = "";  
    String num2 = "";  
    boolean b = false;  
    for (int i = 0; i < inp.length(); i++) {  
        if (inp.charAt(i) == '+' || inp.charAt(i) == '-' || inp.charAt(i) == '*' ||  
            inp.charAt(i) == '/') {  
            b = true;  
            c = inp.charAt(i);  
        } else if (b) {  
            num2 = num2 + inp.charAt(i);  
        } else {  
            num1 = num1 + inp.charAt(i);  
        }  
    }  
    String ans = simple_cal(num1, c, num2);  
    System.out.println(ans);  
}
```

```
} }
```

```
11) import java.util.Scanner;
```

```
public class AS6_Q11 {
```

```
public static void main(String[] args) {
```

```
Scanner sc = new Scanner(System.in);
```

```
System.out.print("Enter a double number: ");
```

```
String doubleStr = sc.nextLine();
```

```
double doubleNumber = Double.parseDouble(doubleStr);
```

```
System.out.println("The double number is: " + doubleNumber);
```

```
} }
```

```
12) import java.util.Scanner;
```

```
public class AS6_Q12 {
```

```
public static void main(String[] args) {
```

```
Scanner sc = new Scanner(System.in);
```

```
System.out.print("Enter an integer number: ");
```

```
String intStr = sc.nextLine();
```

```
int intNumber = Integer.parseInt(intStr);
```

```
System.out.println("The integer number is: " + intNumber);
```

```
} }
```

```
13) import java.util.Scanner;

public class Asb_Q13 {

    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);

        System.out.println("Enter the number");

        int num = sc.nextInt();

        if (num > 0) {

            for (int i = 1; i <= 10; i++) {

                System.out.println(num + " x " + i + " = " + num * i);

            }

        }

    }

}
```

```
14) import java.util.Scanner;

public class Asb_Q14 {

    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);

        System.out.println("Enter first number");

        int num1 = sc.nextInt();

        System.out.println("Enter second number");

        int num2 = sc.nextInt();

        int top = num1 * num2;
```



```

if (num1 == num2) {
    System.out.println("The HCF of given number is " + num1);
} else if (num1 > num2) {
    while (num1 % num2 != 0) {
        int temp = num1 % num2;
        num1 = num2;
        num2 = temp;
    }
    System.out.println("The HCF of given two numbers is: " + num2);
    System.out.println("The LCM of given two numbers is " + top / num2);
} else {
    while (num2 % num1 != 0) {
        int temp = num2 % num1;
        num2 = num1;
        num1 = temp;
    }
    System.out.println("The HCF of given two numbers is: " + num1);
    System.out.println("The LCM of given two numbers is " + top / num1);
}
}
}
}

```

15) import java.util.Scanner;

public class AS6_Q15 {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

System.out.println("Enter number");

int n = sc.nextInt();

double sum = 0.0;

for (int i = 1; i <= n; i++) {

sum = sum + (1.0 / i);

}

System.out.println("The sum of the series is : " + sum);

}}

16) import java.util.Scanner;

public class AS6_Q16 {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

boolean val = true;

int max = Integer.MAX_VALUE;

int min = Integer.MIN_VALUE;

```

do {

    System.out.println("Enter the number:");

    int num = sc.nextInt();

    if (max <= num)

        max = num;

    if (min > num)

        min = num;

    System.out.println("Do u want to continue?(Type true to continue ,else
false)");

    val = sc.nextBoolean();

} while (val);

System.out.println("Max element: " + max);

System.out.println("Min element: " + min);

}}

```

```

17) import java.util.Scanner;

public class AS6_Q17 {

    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);

        System.out.println("Enter the size of array ");

        int n = sc.nextInt();
    }
}

```

```

int[] arr = new int[n];

System.out.println("Enter the values of the array");

int max = Integer.MIN_VALUE;

int min = Integer.MAX_VALUE;

for (int i = 0; i < n; i++) {

    arr[i] = sc.nextInt();

    if (arr[i] >= max)

        max = arr[i];

    if (arr[i] <= min)

        min = arr[i];

}

System.out.println("Max value:" + max);

System.out.println("Min value:" + min);

} }

```

```

18) import java.util.*;

public class AS6_Q18 {

    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);

        System.out.println("Enter the size of array ");

        int n = sc.nextInt();
    }
}

```

```

int[] arr = new int[n];

System.out.println("Enter the values of the array");

for(int i = 0; i < n; i++)

arr[i] = sc.nextInt();

Arrays.sort(arr);

System.out.println("Enter the k-th position:");

int k = sc.nextInt();

if(n-2*k >= 0) {

System.out.println(k+"-th Max element is :"+arr[n-k]);

System.out.println(k+"-th Min element is :"+arr[k-1]);

}}

```

```

19) import java.util.Scanner;

public class Q8b_Q19 {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

System.out.println("Enter the size of array ");

int n = sc.nextInt();

int[] arr = new int[n];

System.out.println("Enter the values of the array");

for (int i = 0; i < n; i++)

```

```
arr[i] = sc.nextInt();
```

```
System.out.println("After reversing the array:");
```

```
int i = 0;
```

```
int j = n - 1;
```

```
while (i < j) {
```

```
    int temp = arr[i];
```

```
    arr[i] = arr[j];
```

```
    arr[j] = temp;
```

```
    i++;
```

```
    j--;
```

```
}
```

```
for (int e : arr) {
```

```
    System.out.print(e + " ");
```

```
} }
```

```
20) import java.util.Scanner;
```

```
public class AS6_Q20 {
```

```
    public static void main(String[] args) {
```

```
        Scanner sc = new Scanner(System.in);
```

```
        System.out.println("Enter the size of array ");
```

```
int n = sc.nextInt();

int[] arr = new int[n];

int min = Integer.MAX_VALUE;

System.out.println("Enter the values of the array");

for (int i = 0; i < n; i++) {

    arr[i] = sc.nextInt();

    if (min > arr[i]) {

        min = arr[i];

    }

    for (int j = i + 1; j < n; j++) {

        if (arr[j] < arr[i]) {

            int temp = arr[j];

            arr[j] = arr[i];

            arr[i] = temp;

        }

    }

}

System.out.println("The sorted array is :");

for (int e : arr) {

    System.out.print(e + " ");

}

}
```