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

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

```java
3) public class AS6_Q3 {
public static void main(String[] args) {
double num =50;
Double Number = num;
System.out.println("By Autounboxxing: "+Number);
Double N2 = new Double(num);
System.out.println("Using Constructor: "+N2);
} }
```

```java
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 Autounboxxing: "+Number);
Boolean N2 = new Boolean(false);
System.out.println("Using Constructor: "+N2);
} }
```

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

```java
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 AS6_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);
```

```java
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:

```java
} }
```

```java
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 = "";
```

```java
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_calc(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);
} }
```

```java
13) import java.util.Scanner;
public class AS6_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);
}}}}
```

```java
14) import java.util.Scanner;
public class AS6_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);
```

```java
System.out.println("The LCM of given two numbers is " + top / num);
}}}
```

15)
```java
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)
```java
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.MIN_VALUE;
int min = Integer.MAX_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();
```

```java
        } 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++)
```

```java
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)
```java
import java.util.Scanner;
public class AS6_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)
```java
import java.util.Scanner;
public class AS6_Q20 {
```

```java
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 i = 0; i < n; 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 + " "); }}}
```