Java Examples on Type Casting

1. Java Program to Add two numbers

```
import java.io.BufferedReader;
import java.io.InputStreamReader;
import java.io.IOException;

public class main
{
   public static void main(String args[]) throws IOException
   {
      BufferedReader reader=new BufferedReader(new
InputStreamReader(System.in));
      System.out.print("Enter two numbers:");

      int a=Integer.parseInt(reader.readLine());
      int b=Integer.parseInt(reader.readLine());

      System.out.println("Addition="+(a+b));
   }
}
```

Output:

```
Enter two numbers:12
13
Addition=25
```

2. Java Program Subtract two numbers

```
import java.io.BufferedReader;
import java.io.InputStreamReader;
import java.io.IOException;

public class main
{
   public static void main(String args[]) throws IOException
   {
      BufferedReader reader=new BufferedReader(new
InputStreamReader(System.in));
```

```
        System.out.print("Enter two numbers:");

        int a=Integer.parseInt(reader.readLine());
        int b=Integer.parseInt(reader.readLine());

        System.out.println("Subtraction="+(a-b));
    }
}
```

Output:

```
Enter two numbers:13
2
Subtraction=11
```

3. Java Program to Multiply two numbers

```
import java.io.BufferedReader;
import java.io.InputStreamReader;
import java.io.IOException;

public class main
{
    public static void main(String args[]) throws IOException
    {
        BufferedReader reader=new BufferedReader(new
InputStreamReader(System.in));
        System.out.print("Enter two numbers:");

        int a=Integer.parseInt(reader.readLine());
        int b=Integer.parseInt(reader.readLine());

        System.out.println("Multiply="+(a*b));
    }
}
```

Output:

```
Enter two numbers:2
3
Multiply=6
```

4. Java Program to Check whether a number is Even or Odd

```
import java.io.BufferedReader;
import java.io.InputStreamReader;
import java.io.IOException;

public class main
{
   public static void main(String args[]) throws IOException
   {
      BufferedReader reader=new BufferedReader(new
InputStreamReader(System.in));

      System.out.print("Enter a number:");
      float a=Integer.parseInt(reader.readLine());

      if(a%2==0)
      {
      System.out.println("Number is even");
      }
      else
      {
      System.out.println("Number is odd");
      }
   }
}
```

Output:

```
Enter a number:12
Number is even
```

5. Check whether a character is a Vowel or Consonant

```
import java.util.Scanner;

public class SimpleCharInput
{

   public static void main(String[] args)
   {
      Scanner scanner = new Scanner(System.in);
      System.out.print("Enter a character: ");
      char ch = scanner.next().charAt(0);
```

```
        if (ch == 'a' || ch == 'e' || ch == 'i' || ch == 'o' || ch == 'u')
        {
            System.out.println(ch + " is a vowel.");
        }
        else
        {
            System.out.println(ch + " is a consonant.");
        }
    }
}
```

Output:

```
Enter a character: a
a is a vowel.
```

6. Java Program to find Average of Two numbers

```
import java.io.BufferedReader;
import java.io.InputStreamReader;
import java.io.IOException;

public class main
{
    public static void main(String args[]) throws IOException
    {
        BufferedReader reader=new BufferedReader(new
InputStreamReader(System.in));
        System.out.print("Enter two numbers:");

        float a=Integer.parseInt(reader.readLine());
        float b=Integer.parseInt(reader.readLine());

        System.out.println("Average="+((a+b)/2));
    }
}
```

Output:

```
Enter two numbers:3
6
Average=4.5
```

7. Java Program to find Average of Three numbers

```
import java.io.BufferedReader;
```

```
import java.io.InputStreamReader;
import java.io.IOException;

public class main
{
   public static void main(String args[]) throws IOException
   {
      BufferedReader reader=new BufferedReader(new
InputStreamReader(System.in));
      System.out.print("Enter two numbers:");

      float a=Integer.parseInt(reader.readLine());
      float b=Integer.parseInt(reader.readLine());
      float c=Integer.parseInt(reader.readLine());

      System.out.println("Average="+((a+b+c)/3));
   }
}
```

Output:

```
Enter two numbers:2
4
5
Average=3.6666667
```

8. Java Program to find Area of Square

```
import java.io.BufferedReader;
import java.io.InputStreamReader;
import java.io.IOException;

public class main
{
   public static void main(String args[]) throws IOException
   {
      BufferedReader reader=new BufferedReader(new
InputStreamReader(System.in));

      System.out.print("Enter size of side of square:");
      float a=Integer.parseInt(reader.readLine());

      System.out.println("Area of Square="+(a*a));
   }
}
```

Output:

```
Enter size of side of square:4
Area of Square=16.0
```

9. Java Program to Calculate Simple Interest

```
import java.io.BufferedReader;
import java.io.InputStreamReader;
import java.io.IOException;

public class main
{
   public static void main(String args[]) throws IOException
   {
      BufferedReader reader=new BufferedReader(new
InputStreamReader(System.in));

      System.out.print("Enter the Principle:");
      float p=Integer.parseInt(reader.readLine());

      System.out.print("Enter rate of Interest:");
      float r=Integer.parseInt(reader.readLine());

      System.out.print("Enter no. of Years:");
      float t=Integer.parseInt(reader.readLine());


      System.out.println("Simple Interest="+((p*r*t)/100));
   }
}
```

Output:

```
Enter the Principle:10000
Enter rate of Interest:9
Enter no. of Years:5
Simple Interest=4500.0
```

10. Java Program to Calculate Compound Interest

```
import java.io.BufferedReader;
import java.io.InputStreamReader;
import java.io.IOException;
import static java.lang.Math.pow;
```

```
public class main
{
   public static void main(String args[]) throws IOException
   {
      BufferedReader reader=new BufferedReader(new
InputStreamReader(System.in));

      System.out.print("Enter the Principle:");
      float p=Integer.parseInt(reader.readLine());

      System.out.print("Enter rate of Interest:");
      float r=Integer.parseInt(reader.readLine());

      System.out.print("Enter no. of Years:");
      float t=Integer.parseInt(reader.readLine());

      System.out.println("Compound Interest="+((p*Math.pow((1+(r/100)),t))-p));
   }
}
```

Output:

```
Enter the Principle:10000
Enter rate of Interest:3
Enter no. of Years:4
Compound Interest=1255.0868494732422
```