

OOPJ Assignments 4

1. Write a program that demonstrates widening conversion from int to double and prints the result.

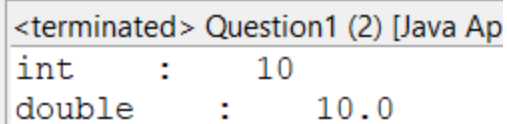
```
package com.assignment.question1;

public class Question1 {

    public static void main(String[] args) {

        int a = 10;
        double d = a;    //Widening from int to double. No
        need of explicit typecast

        System.out.println("int      :    " + a);
        System.out.println("double   :    " + d);
    }
}
```



```
<terminated> Question1 (2) [Java Ap
int      :    10
double   :    10.0
```

2. Create a program that demonstrates narrowing conversion from double to int and prints the result.

```
package com.assignment.question;

public class Question2 {
```

```

public static void main(String[] args) {
    double d = 10.5;
    int a = (int)d;    //Narrowing

    System.out.println("double    :    " + d);
    System.out.println("int      :    " + a);
}
}

```

```

<terminated> Question2 (2) [Java Ap
double    :    10.5
int      :    10

```

3. Write a program that performs arithmetic operations involving different data types (int, double, float) and observes how Java handles widening conversions automatically.

```

package com.assignment.question;

public class Question3 {

    public static void main(String[] args) {
        double d = 10.5;
        int a = 10;    //Narrowing
        float f = 10.1f;

        float sum1 = a+f;
        double sum2 = d+f;
        double sum3 = f+a;

        System.out.println("float+int    :    " + sum1);
        System.out.println("double+float    :    " + sum
2);

```

```

        System.out.println("double+int      :      " + sum3);

    }
}

```

```

<terminated> Question3 (3) [Java Application] C:\Users\reddy\
float+int      :      20.1
double+float   :      20.600000381469727
double+int     :      20.100000381469727

```

4. Write a Program that demonstrates widening conversion from int to (double, float, boolean, string) and prints the result.

```

package com.assignment.question;

public class Question4 {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        int number = 4;
        double d = number;
        float f = number;
        boolean b = number>0 ? true : false;
        String string = String.valueOf(number);

        System.out.println("Double:  "+d);
        System.out.println("float:   "+f);
        System.out.println("Boolean: "+b);
        System.out.println("String:  "+string);
    }
}

```

<terminated> Question4 (3) [Ja

Double: 4.0

float: 4.0

Boolean: true

String: 4