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Morning : 9:30 to 11:30 am batch

Assignment -2

This Assignment consists of method overloading and using the concept of static Keyword in Java Program

Method Overloading 1:

//Program 1

**package** gen1;

**class** OverloadDemo

{

**void** test()

{

System.***out***.println("No Parameters ");

}

**void** test(**int** a)

{

System.***out***.println("a : "+a);

}

**void** test(**int** a,**int** b)

{

System.***out***.println("a and b : "+a + " "+b);

}

**double** test(**double** a)

{

System.***out***.println(" double a :"+a);

**return** a\*a;

}

}

**public** **class** methodoverload1

{

**public** **static** **void** main(String args[])

{

OverloadDemo ob = **new** OverloadDemo();

**double** result;

ob.test();

ob.test(10);

ob.test(10,20);

result = ob.test(123.45);

System.***out***.println(" Result of ob.test(123.45)"+result);

}

}

Output:

No Parameters

a : 10

a and b : 10 20

double a :123.45

Result of ob.test(123.45)15239.9025

Method Overloading 2:

2)Program2

Below program is to show the automatic type conversion in method overloading :

**Widening or Automatic Type Conversion :**

Widening conversion takes place when two data types are automatically converted. This happens when:

* The two data types are compatible.
* When we assign value of a smaller data type to a bigger data type.

**package** gen1;

**class** OverloadDemo

{

**void** test()

{

System.***out***.println("No Parameters ");

}

/\*

void test(int a)

{

System.out.println("a : "+a);

}

\*/

**void** test(**double** a)

{

System.***out***.println("a : "+a);

}

**void** test(**int** a,**int** b)

{

System.***out***.println("a and b : "+a + " "+b);

}

/\*

\* double test(double a)

{

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

return a\*a;

}

\*/

}

**public** **class** methodoverload1

{

**public** **static** **void** main(String args[])

{

OverloadDemo ob = **new** OverloadDemo();

**double** result;

ob.test();

ob.test(10);

ob.test(10,20);

// result = ob.test(123.45);

// System.out.println(" Result of ob.test(123.45)"+result);

}

}

Output:

No Parameters

a : 10.0

a and b : 10 20

Following program is used to show the Concept of Static Keyword in Java:

1)Static variables

2)Static methods

3)Static blocks

Program3 :

**package** gen1;

**public** **class** static\_keyword

{

**static** **int** *a* =3;

**static** **int** *b*;

**static** **void** meth(**int** x)

{

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

System.***out***.println("a = "+*a*);

System.***out***.println("b = "+*b*);

}

**static**

{

System.***out***.println(" double a :"+*a*);

*b*=*a*\*4;

}

**public** **static** **void** main(String args[])

{

*meth*(42);

}

}

Output:

Static block initialized

x = 42

a = 3

b = 12