**Q1.** class box {

int width;

int height;

int length;

}

class mainclass {

public static void main(String args[])

{

box obj = new box();

System.out.println(obj);

}

}

**Q2.** class overload {

static int x;

double y;

void add(int a , int b) {

x = x+ a + b;

}

void add(double c , double d){

y = c + d;

}

overload() {

this.x = 20;

this.y = 10.0;

}

}

class Output {

public static void main(String args[])

{

overload obj = new overload();

overload obj1 = new overload();

int a = 2;

double b = 3.2;

obj.add(a, a);

obj1.add(b, b);

System.out.println(obj.x + " " + obj.y);

System.out.println(obj1.x + " " + obj1.y);

}}

**Q3.** class test {

int a;

int b;

test(int i, int j) {

a = i;

b = j;

}

void meth(test o) {

o.a \*= 2;

O.b /= 2;

}

}

class Output

{

public static void main(String args[])

{

test obj = new test(10 , 20);

obj.meth(obj);

System.out.println(obj.a + " " + obj.b);

}

}

Q4. class Main {

public static void main(String args[]) {

System.out.println(fun());

}

int fun() {

return 20;

} }

Q5.

class Bitwise

{

public static void main(String [] args)

{

int x = 11 & 9;

int y = x ^ 3;

System.out.println( y | 12 );

}

}

Q6.

class Test

{ public void display(int a, double b)

{

System.out.println(" This is Double");

}

public void display(int a, float b)

{

System.out.println(" This is Float");

}

public static void main(Stirng args[])

{ Test t = new Test();

t.display(10, 5); }}

**Q7**. class Overload

{

static int x;

double y;

static { x =10;}

void add(double c , double d){

x = (x+c\*d);

y = (c + d)\*x;

}

Overload() {

this.y = 10.0;

}

}

class Output {

public static void main(String args[]){

Overload obj = new Overload();

Overload obj1 = new Overload();

int a = 2; double b = 3.5;

obj.add(a, a); obj1.add(b, b);

System.out.println(obj.x + " " + obj.y);

System.out.println(obj1.x + " " + obj1.y);

}

}

**Q8.** public class A

{

void A()

{

System.out.println("Class A");

}

public static void main(String[] args)

{

new A();

}

}

**Q9**. class A {

final public int GetResult(int a, int b)

{ return 0; }

}

class B extends A

{ public int GetResult(int a, int b) {return 1; }

}

public class Test

{ public static void main(String args[])

{

B b = new B();

System.out.println("x = " + b.GetResult(0, 1));

}

}

Q10.

class Output {

public static void main(String args[])

{

short x = 0x8000;

byte y = 010;

System.out.println(x + " and "+y);

x = x >>> 15;

y = y<<4;

System.out.println(x + " and "+y);

}

**Q10. Needed Type casting**

**-32768 and 8**

**-1 and -128**

Q1. Answer: Memory address

Q2. Answer: 24 10.0

24 6.4

Q3. Answer: 20 10