OOPS - 2

OOPS components

Which of the following is not an OOPS component?

Options

This problem has only one correct answer

- ◯ Encapsulation
- ◯ Inheritance
- ◯ Polymorphism
- ◉ Aggregation

✓ Hurray! Correct Answer

Correct Statement

Select the correct statement(s).

Options

This problem may have one or more correct answers

- ☑ Encapsulation is hiding of data from outside world. ✔
- ☑ Abstraction means showing only necessary details to the user. ✔
- ☑ Inheritance is acquiring properties of other class. ✔
- ☐ Java is not an object oriented language.

✓ Hurray! Correct Answer

Keyword

Which keyword is used to inherit a class?

Options

This problem has only one correct answer

- ◯ inherits
- ◉ extends
- ◯ imports
- ◯ None of these

✓ Hurray! Correct Answer

Properties of a class

Which variable(s) can the class person access in the following code?

```
class person{
    String name;
    int weight;
}
class Student extends person{
    int roll_number;
    String school_name;
}
```

Options

This problem may have one or more correct answers

- ☑ name ✔
- ☑ weight ✔
- ☐ roll_number
- ☐ school_name

✅ Hurray! Correct Answer

Predict the output

What would be the output of the following code?

```
public class person {
    String name;
    int weight;
}
public class Student extends person{
    int roll_number;
    String school_name;
    void print()
    {
        System.out.print(roll_number+" "+name+"
"+weight);
    }
}
public class Student_info {
    public static void main(String[] args) {
        Student s=new Student();
        s.name="ayush";
        s.roll_number=10;
        s.weight=65;
        s.school_name="Vijaya Sr. Sec. School";
        s.print();
    }
}
```

Answer

10 ayush 65 ✔

Correct Answer

Properties of a class

Which variable(s) can the class Student access in the following code?

```
class person{
    String name;
    private int weight;
}
class Student extends person{
    private int roll_number;
    String school_name;
}
```

Options

This problem may have one or more correct answers

☑ name ✔

☐ weight

☑ roll_number ✔

☑ school_name ✔

✅ Hurray! Correct Answer

Predict the output

What will be the output of the following code?

```
class Vehicle{
    String colour;
    private int number;
}

class Car extends Vehicle{
    public static void main(String[] args) {
        Vehicle v = new Vehicle();
        v.colour = "black";
        v.number = 8486;
        System.out.println(v.number + " " + v.colour);
    }
}
```

Options

This problem has only one correct answer

○ 8486 black

◉ Compile time error

○ Run time error

○ black 8486

✅ Hurray! Correct Answer

What will be the output of the following code?

Both the classes are in same package.

```java
class Vehicle{
    String colour;
    private int number;
    void set(int number)
    {
        number=number;
    }
    int get()
    {
        return number;
    }
}

class Car extends Vehicle{
    public static void main(String[] args) {
        Vehicle v = new Vehicle();
        v.colour = "white";
        v.set(1010) ;
        System.out.println(v.colour + " " + v.get());
    }
}
```

white 0 ✔

Predict the output

What will be the output of the following code?

```java
class Vehicle{
    String colour;
    private int number;
    void print()
    {
        System.out.println("vehicle");
    }
}

class Car extends Vehicle{
    void print()
    {
        System.out.println("car");
    }
}
class Honda extends Car{
    void print()
    {
        System.out.println("Honda");
    }
}
class buy_car{
    public static void main (String[] args) {
        Car c=new Car();
        c.print();
    }
}
```

Options

This problem has only one correct answer

○ vehicle

⦿ car

○ honda

○ error

✓ Hurray! Correct Answer

Predict the output

What will be the output of the following code?

```java
class Vehicle{
    String colour;
    private int number;
    void print()
    {
        System.out.println("vehicle");
    }
}

class Car extends Vehicle{
    void print()
    {
        System.out.println("car");
    }
}
class Honda extends Car{
    void print()
    {
        System.out.println("Honda");
    }
}
class buy_car{
    public static void main (String[] args) {
        Honda c=new Honda();
        c.print();
    }
}
```

Options

This problem has only one correct answer

○ vehicle

○ car

◉ Honda

○ error

✓ Hurray! Correct Answer

Correct Option

Select option for access modifiers in increasing order of their visibility.

Options

This problem has only one correct answer

○ Private, Protected, Default, Public

○ Protected, Private, Default, Public

◉ Private, Default, Protected, Public

○ Private, Default, Public, Protected

✓ Hurray! Correct Answer

Correct Option

The following class Vehicle, declares a protected variable name, inside package p1:

```
package p1;

public class Vehicle {
    protected String name;
}
```

Which of the following code(s) will give error?

```
A.
package p1;

public class Car {
    void props() {
        Vehicle v = new Vehicle();
        v.name = "Vehicle 1st";
    }
}

B.
package p2;

class Car extends Vehicle {
    public static void main(String args[]) {
        Car c = new Car();
        c.name = "Ferrari";
    }
}
```

Options

Attempts left: 0/2

This problem may have one or more correct answers

☐ A

☑ B ✔

☑ C ✔

☐ None

✅ Hurray! Correct Answer

Solution Description

Please refer to this video: https://www.youtube.com/watch?v=zCKlaA6So3A, to understand the solution.

Predict the output

What will be the output of the following code?

```java
class Vehicle
{
   int maxSpeed = 120;
}
class Car extends Vehicle
{
   int maxSpeed = 180;
   void display()
   {
      System.out.println(super.maxSpeed);
   }
}
class Test
{
   public static void main(String[] args)
   {
      Car c = new Car();
      c.display();
   }
}
```

Answer

120 ✓

Correct Answer

Predict the output

What will be the output of the following code?

```java
class Person
{
   void fun()
   {
      System.out.print("person class");
   }
}
class Student extends Person
{
   void fun()
   {
      System.out.print("student class");
   }
   void display()
   {
      fun();
      super.fun();
   }
}
class Test
{
   public static void main(String args[])
   {
      Student s = new Student();
         s.display();
   }
}
```

Answer

student classperson clas✔

Correct Answer

What is the output

What Is the o/p of following code

```
class Vehicle {
    int seats;
    int speed;

    public Vehicle(int seats, int speed) {
    System.out.print("Vehicle ");
    this.seats = seats;
    this.speed = speed;
    }
}

class Car extends Vehicle {
    int id;
    Car() {
    System.out.print("Car ");
    }
}

class Main {
    public static void main(String args[]) {
    Car c = new Car();
    }
}
```

Options

This problem has only one correct answer

◯ Vehicle Car

◯ Car Vehicle

◯ Runtime error

◉ Compilation error

✓ Hurray! Correct Answer

What is the output

What Is The Output

All classes are in same package.

```java
class Car {
    private int seats;
    private int speed;

    public Car() {
    System.out.print("This Is Car ");
    }
}

class Audi extends Car {
    Audi() {
    System.out.print("This Is Audi ");
    super();
    }
}

class Main {
    public static void main(String args[]) {
    Audi a = new Audi();
    }
}
```

Options

This problem has only one correct answer

○ This Is Car This Is Audi

○ This Is Audi This Is Car

◉ Compilation Error

○ Runtime Error

✔ Hurray! Correct Answer

What is the output

What is the output.

All classes are in same package.

```java
class Car {
    private int seats;
    private int speed;

    public Car(int seats, int speed) {
    this.seats = seats;
    this.speed = speed;
    System.out.print("This Is Car ");
    }
}

class Audi extends Car {
    Audi(int x, int y) {
    super(x,y);
    System.out.print("This Is Para Audi ");
    }
    void Audi() {
    System.out.print("This Is Def Audi");
    }
}

class Main {
    public static void main(String args[]) {
    Audi a = new Audi(5,7);
    a.Audi();
    }
}
```

Answer

This Is Car This Is Para A✔

Correct Answer

Correct Statement

Select the valid statement(s) on the basis of following code.

Both classes are in same package.

```
class Vehicle {}
class Car extends Vehicle {}
```

Options

This problem may have one or more correct answers

- ☑ Vehicle obj = new Vehicle(); ✔
- ☑ Vehicle obj = new Car(); ✔
- ☑ Car obj = new Car(); ✔
- ☐ Car obj = new Vehicle();

✅ Hurray! Correct Answer

Fill the output

What is the output -

All classes are in same package.

```java
class Vehicle{
    void print(){
    System.out.print("Vehicle class");
    }
}
class Car extends Vehicle{
    void print(){
    System.out.print("Car class ");
    }
}

public class Main {
    public static void main(String[] args){
    Vehicle obj1 = new Car();
    obj1.print();

    Vehicle obj2 = new Vehicle();
    obj2.print();
    }
}
```

Answer

Car class Vehicle class ✔

Correct Answer

Predict the output

What will be the output of the following code?

```java
class Vehicle{
    String colour;
    private int number;
    void print()
    {
        System.out.println("vehicle");
    }
}

class Car extends Vehicle{
    void print()
    {
        System.out.println("car");
    }
}
class Honda extends Car{
    void print()
    {
        System.out.println("Honda");
    }
}
class buy_car{
    public static void main (String[] args) {
        Car c=new Honda();
        c.print();
    }
}
```

Options

This problem has only one correct answer

○ vehicle

○ car

◉ Honda

○ error

✓ Hurray! Correct Answer

What will be the output of the following code?

```java
class ExceptionThrown
{
    static int divideByZero(int a, int b){
        int i = a/b;
        return i;
    }
    static int computeDivision(int a, int b) {
        int res =0;
        try
        {
            res = divideByZero(a,b);
        }
        catch(NumberFormatException ex)
        {
            System.out.println("Exception occured");
        }
        return res;
    }
    public static void main(String args[]){
        int a = 1;
        int b = 1;
        int i=0;
        try
        {
            i = computeDivision(a,b);

        }
        catch(ArithmeticException ex)
        {
            System.out.println(ex.getMessage());
        }
        System.out.print(i);
    }
}
```

Options

This problem has only one correct answer

◉ 1

◯ Exception thrown

◯ Runtime error

◯ Compile time error

✔ Hurray! Correct Answer

Predict the output

What will be the output of the following code?

```java
class ThrowsExecp {
static void fun() throws Exception
{
   throw new Exception();
}
public static void main(String args[])
{
   try {
      fun();
   }
   catch (Exception e) {
      System.out.print("caught in main.");
   }
   System.out.print("All is well");
}
}
```

Answer

caught in main.All is wel✔

Correct Answer

What is the output

Select the output of the following program

```java
class A{
   public static void main(String[] args){

   try{
      return;
   }
   finally{
      System.out.println("Hello coding ninjas");
   }
  }
}
```

Options

This problem has only one correct answer

○ No output

○ Exception if thrown at run time

○ Compile time error

◉ Hello coding ninjas

✓ Hurray! Correct Answer

What is the output

Select the output of the following program

```
class A{
    public static void main(String[] args){

    try{
        int a = 5/0;
    }
    catch(Exception e){
        System.out.print("Exception caught ");
    }
    catch(ArithmeticException e){
        System.out.print("Arithmetic Exception caught ");
    }
    finally{
        System.out.print("finally block");
    }
    }
}
```

Options

This problem has only one correct answer

○ Exception caught

○ Exception caught Arithmetic Exception caught finally block

◉ Compile time error

○ finally block

✓ Hurray! Correct Answer

Valid Statement

Select the correct statement -

Options

This problem has only one correct answer

○ The 'try' block should be followed by a 'catch' block.

○ The 'try' block should be followed by a 'finally' block.

◉ The 'try' block should be followed by either a 'catch' block or a 'finally' block.

○ can write independent try block

✓ Hurray! Correct Answer