```
in hortance
> Single
> multilevel
>multiple (not supported in Java use interface for it)
> heiror chical
> hylorid
 Single introvilance
 Closs A {
      void dip A () &
 System. Out . println ("A"); }}
  Class B extends A &
        ) () Early bion
  System. out. Println ("B"); 33
  Closs Tosa &
      Public Modic void main (String [] args ) {
                B obj = new B();
                  Oly - dia A ();
                  Obj. dia B (); 33
   output:
```

Mullilevel

Class A {
Void die 4 () {
System out, printen ("A"); }}

```
Class B extends A {
   void dia B() {
System. out. painten ("B"); }}
Class ( extends B {
  void dia ( ( ) {
System. Out. painten (" ("). ??
                                          margin or opinion
 Clase Main {
  Public Datic void main (Storing [] args ){
             ( d = new ( ();
                d. dia A ();
                 d. diaB ().
                d. diac (): 33
                                      The A standard has make
Dulput
                                         , A Martin E' was
heironchy
Closs A S
      Void dia A () { System. out. Printer ("A"); }}
Class B extends A {
       void diaB () & System out painten ("B") - 33
Class C extends A &
       void diaB () & System. out. paintln ("("); }}
Close main {
    Public Static void main (Storing II orgs) {
             ( d = new ( C) ,
                                          subpid.
             d. dia C();
             de. dia A (); 33
```

```
Mysuid
  (look A &
         3 () April Diav
         System out Printer ("A"); }}
  Class B ealonds A &
          3 () Bails Blow
  System . out pointer ("B"); 33
  close c endonda B &
            void dia C () }
  System. out printer ("c"); 33
  class D extends B &
              void diab () }
      System. OLD. Printen ("0");33
  Class main {
       Public Matic void main (String [] ango ) ?
                 Debj = new D();
                    O. diaA ();
                    d. die B();
                     d.diaco: 33
org by .-
   B
Multiple
Choto
        AS
        int a
         ALJS
        void Dioplay AC) &
             Supplan - Out - painten (a) - 33
```

```
inderface B &
         ind &= 10;
          void display B (); }
Class C extende A implemente B &
           ind C;
           C() { C=15 ° }
           Public void dia play B() {
              System out Printer (b),3
            Public void displaye () {
               System. out. pointen (c); 33
Public Class Mains
           Public Madric void main (Storing I ] angl) ?
                  ( d = new (();
                    d display A ();
                    d. diapay B();
                     d. dieplay (1); }}
 Durpur
    10
                    Exception handling
      Class not Jound Exception.
Robbis
        Kloss Main &
Public
         Public Static void main (String args II) {
                class. for Name ("A"); }
            cotch ( Class Not Jourd Exception e) {
                e Print Stack Trace 0; 333
```

```
2. Anithemetic Enception
   Public Class Main {
         Public Static void main (String I] orga )?
                   ind a = 10/0
              System out printer (" lade in try Black"); }
            catch (Asithmetic Exception e){
                System. out printle ("Euron: Arithmetic ouron"); 333
     Owlput:-
     Ester: Arithmetic Even.
3. Array Indon Out Of Bound
    Class Main S
         Public Addic void main (Storing [] anga) {
             tom & [] = {1,2,3}
                   System. Out . Paintln (alon 12]); }
              Obtach (Astray Index Ow Of Bounds Exception : e) {
    System. out painten ("Armay Indon Out Of Bounds Exception: " + e.got Hessage ()): 33
     Owlpub:
      Agronay ander Out Of Bounds Exception: Index 12 out of Bounds.
4) No Such Method
    Public Class Main &
            Public Matic void main (String angle []) {
             f puct
                     mothed That Does Not Exist (); }
              ( odch ( No Such Hethod Exception e ) {
                    System. out. Println (" (aught No Such Hethod Exception: "+
                      e. got Hossage(); 433
```

```
(5) Glega Angument Exception.
   Public Class Porson &
           ind age;
           Public void And Age (int age) &
                 if (age <18) {
                    throw new illegal Argument Exception (" Age much
   be 18 apolition than 18 to voto"); 3.
                Plan &
                    this age = age;
                    System. out Printen (" The porson's age is: " + this age);
              Public Static void main (String [] ongs) {
                   Porpon p = new Porson ();
                    Porson and Age (15); 3
                    (alch (flegal Asigument Enleption e) {
  System out. Println (" (ought an enception: " + e. get hossage ()); 333
   Cought an exception: Age must be greater than 18 to vate.
   Output:-
```