```
Write a java program to create package and subpackage.
package p1;
 class c1 &
        public void m1 () {
               System. out. println ("m1 of e1");
        public static void main (String args[]) {
               C1 Obj = New C1();
               Obj. m1();
 puckage p1.p2;
 Class C2{
     public void m1() {
             System.out. println ("m1 of c2");
DUTPUT
ma of ca
```

2. Write a java program to access the methods from prekage and sub-package.

```
package pack;
    public class A &
           public void mag () {
                    System.out. println ("Hello");
    package my pack;
    Amport pack. *;
    class B §
                    Static void main (String []args) {
           public
                    A obj = new A ();
                    Obj. mg ();
    OUTPUT
    Hello
3. Exception: - CASE 1: Problem without exception handling.
   class A {
            public static void main (string anys []) {
                   Port data = 100/0 ;
                   System. out. println ("data = "+ data);
```

```
CASE 2: Exception creates but properly handled
Class BS
      public Static void main (String args []) {
           try { int data = 200/0;
           I Catch (Exception C) {
                 System. Out. println ("Denominator can't be zero");
    to traite a gave program to supposed Jose Multicatch bleck
CASE 3: Exception creates but not handled.
 class es
      public static void main (String []args) {
           try { int data = 100/0;
           3 Catch (Null Pointer Exception c) {
                  System. out. println (c);
OUTPUT (CASE 1):
Exception in thread "main" java. lang. Arithmetic Exception: /by Zero
at A. main (A: java: 3)
```

OUTPUT (CASE 2)

Denominator Cannot be zero

OUTPUT (CASE 3)

Exception in thread "main" java. lang. Anothmetic Exception: /by zero at C. main (C.java: 4)

4. Write a java program to emplement Java Multicatch block.

Class D &

public static void main (String [] args)?

try?

int a[] = new int [5];

a[5] = 30/0;

I cotch (Arithmetic Exception e) {

System. out. println ("Arithmetic Exception occurs.");

3 catch (Array Index Out of Bound Exception e) {

System.out. println ("Array Index out of bound

exception occurs.");

3 Catch (Exception e) {

System.out.println ("Parent Exception occurs");
}

3

OUTPUT

Arithmetic Exception occurs.

5. Write a java program to implement Java Nested try statement.

```
public dess A &
        public static void main (String args []) {
             by {
                            System.out. println ("Going to divide by O");
                             Pnt h = 5/0;
                      } catch (Arithmetic Exception e) {
                              System. out. println (e);
                      try {
                              int a [] = hew int [5];
                              0[5] = 10;
                       3 Catch (Array Index Out OF Bound e Exception e) {
                               System.out. println (e);
                       3 catch (Exception e) &
                               System.out. println (e);
       progress to implement the thrown together
   OUTPUT
   Going to devide by 0
   gavalang. Arithmetic Exception: / by Zero
   gava, long, Array Index Out Of Bound Exception; Index 5 out of bounds for
   length 5
6. Write a java program to implement the throw keyword.
   elass E {
          public static void checkAge (Int age) &
                  if (age <18) {
```

```
throw new Arithmetic Exception ("Access Denied):
                 Jelse &
                        Sistem. out. println ("Access Granted");
                  2
                 Static void main (String I) args) {
                  CheckAge (15);
          3
   Exaption and house " waln't fine joe ID Exaptions a state then
           of the methodogs
   Execution in thread "main" java. lang. Anithmetic Exception: Access Devied
             at E. checkAge (E. java: 4)
              at E. main (E. java: 10)
7. Write a java program to Emplement the throws keyword.
   import java.io. *;
   class MS
                method () throws ID Exception {
                   throw now IO Exception ("device Error");
   class F {
                  Static void main (string [] args) throws JOException f
           public
                  M m = new M();
                  m. method ();
```

```
OUTPUT
Exception in thread "main" java. 10. IO Exception: device Error
        at, M. method (F. java: 4)
        at F. main (F. java: 10)
Casa: finally example where exception doesn't occur.
class Gr &
              Static vold main (String []args) {
        public
                       Put data = 25/5;
                       System. out. println ( data);
                 } Catch (Nill Painter Exception e) {
                       System.out. println (e);
   balbind
                  I finally {
                       System.out. println ("finally block is always
                                           executed");
                  3
      3
OUTPUT
5
finally block is always executed.
CASE 2: Finally example where exception occurs and not handled.
class H {
      public static void main (String args[]) {
             try { 3nt data = 100/0;
                    System. Out. print (n (duta);
```

I Outch (Null Pointer Exception e) {

8

```
Sistemout-println (e);
            I finally &
                     System.out. println ("finally block");
            3
     }
3
                           notinges weeks synote efforts best
OUTPUT
finally block
Exception in thread "main" java lang-Arithmetic Exaption: /by zero
         at H.main (H- *java: 4)
Case 3: finally example where exception occurs and handled.
Class I &
       public Static void main (String args[]){
             try of get data = 100/0;
                    Sistem.out. println (data);
              B Catch (Anothernetic Exception e) {
                     System.out. println ("Exception handled");
               3 finally {
                     System. out. println ("finally Keyword");
               7
halfmuld has been errors religious studies algorite at Month at an A
7
OUTPUT
Exception Handled
Finally Keyword
```

```
Create a user-defined exception named check Argument to check
the number of arguments passed through the command line.
 If the number of argument is less than 5, throw the comes
 Check Argument Exception, else print the addition of all the five numbers
 Class CheckArgument extends Exception &
      Exp {
 Class
        public static void main (String args []) {
             fint Tijb, ans=0;
             Port S[] = new int [5];
             try &
                     int Cht = 0;
                     for (1=0; 1< S. length ; 1++) {
                            S[i] = Integer. parse Int (args[i]);
                             Cut ++;
                             of largs length (5) {
                                        throws new CheckArgument ();
                            felse of (args. length > 5) {
                                       throw new Check Argument ();
                             3
                     for (1=0; 1 < S. length; 1++) {
                             ans + = S[1];
                } cotch (Check Argument m) {
                      System.out. println (" Not 5 Integer ");
                 System. out. println ("The sum is" + ans);
```

7

as deader a vision-defined exception valued check hymnes &

people static bid Conto (String Congetted) and the property of week and is transposed to radinary with it

int interest

it of the man = [] a tril

Exact Angunest Exception . else point true estation of all the first OUTPUT (1)

java Exp 1 2 3 45

The sum is 15

OUTPUT (2)

java Exp 2 4 6 8

Not 5 Integer

The Sum is O