IT- 22049 - Anil Mollik	Clars clarsobject of String name.	system out preinth ("My nome is Anik");	public elang objectclars of shing 12 and public shute raid main (shing 12 and	class of me new classoffeet	my ase 23; my display CD	Libert, Anek
	200	3	94			

```
Program-2: Acress Modifien
class Penson {
     Private String name:
     public void set Name (string new Name) {
         name = newName;
  ict) 31 thing two maters } ( ) or you brow
    public string get Name () {
         neturn name:
                         ) sanstinada I sal:
 public class access Modifiens ?
       public state void main (String [] angs) [
           Penson p=new Penson ()!
           P.set-Name ("Atif")
           System.out.pnintin (p.get Name ());
```

```
Program 3: Inheritance and Protected Access
clasis student & I'm a some Little & money
  Protected String type = "Atif"
   void display () {
     System.out.printin ("I am a student")
             public void set Hame (stani
class Teachen extends Student {
     void unque () { System.out.pnintln (typet
            ) () omoth his a bank backbenchen "2
  3
                     mon market
 class Inhenitance {
      public static void main (ching [] angi)
      Teachen tenew Teachen ()
        tidisplay()ion=q nozna?
        time (() anothers
   I am a student
```

```
Program 4: Encapsulation
import java. util. *;
class Bank Account { sons la D-tag. 200
    private double balance:
public void deposit (doubte amount)
                  O.001: sompled trovi
  :f(amount>0)
    balance = balance tamount
                 3 Bonnes dess Checkunes
   3
           () brown a vom biou toomtedo
public double get Balance(){
    return balance
public class Encapsulations
public static void main (String I Jargs)
 Scannen Sc= new Scannen (System.in);
Bank Accountace = new Bank Account ();
System.out. point ("Enteramoun to depositi");
double amount=sc.nex+Double ();
```

arc. deposit (amount): System out print In (" Current Balance: "t acriget Balance ()) 2000 A Nool 20010 Private double balance Output: Enter amount to deposition 100 Current Balance: 100.0 (OK +nuoma) 7: Program-5: Abstract classec abstract class Creature ({ abstract void make sound (); public double get Galance() {) nun blow cystemout print in ("Running "); 3 class Goat extends Creature { void make sound () { Systemout printin ("Maaaanaaa...") Book Account over now Book Account () . : Public élas. Abstract Class & double amound = co. next Double () -

```
public static void main (string [] angs) {
        Goat g=new Goat():
        g. make sound ();
         9. mun ();
 Output:
  Maga-- aga sopplied of algillom it manger?
                          Bankable [ Bankable [
 Running . -
                             Word book ():
 Program 6: Intentace
                         Harr Playable (
  intenface Animal (
                            : () pold blow
    void sound ();
class cow implements Animal, (
    public void sound () { and bious ideal
  Systemout paintly ("Happba"):12
  public class Intenface Code [ biomsilding
                atic void main (String [] ange) {
```

```
com danem com ();
disound ();
: tratro
 Hamba
Program-7: Multiple Inhanitance
intenface Bankable {
    void bank ();
                        Pregram 6: Intentoce
intenface playable {
                         ) lam na molada;
    void play ();
                           ( ) brown biox
 class Dog + implements Bankable - playable {
     public void bank () { banes bion silling
       system out print in ("Dog is banking ... ?)
    public void play () {
```

```
public class multiple Intenface {
    public static void main (String I ] angs) {
         Dog d= new Dog ():
         d. bank ();
         d.play.();
 Output:
 Dog is banking ....
 Shakib is playing ....
Program-8: ATM machine
limpont java util. *
public class ATM [
     private double balance = 10000.0:
     public void deposit (double amount) {
        if (amount>0) {!
```

balance = balance + amount:

Consider to 1

```
+ Azzerin non hulutlu ( " Zorcuezzin ... O
      : $"+ amount) : 1
 3) (spine [ ] print? ) month bour shot as the q
                : Dogd- non - b god
 30219
   Systemout println ("Invalid amount! Please
    enter a positive number. ")
  3
3
 public void withdraw (doubte amount)
    if (amount) ) {
                        Dog is conking
       if (amount <= bolance) { wolg of distant
          balance = balance - amount;
                   Program 8: ATM marking
      else {
      System.out-println ("Invatid amounti!
           Please enten a positive number. 1).
     $10.00001 = sinalad stavet storing
  3 (tanomo olduch) Hizogob biousildug
   public void check Balance () { 1:
      Systemout printin (" Current Balance:
                               $" + balance);
```

```
public static void main (string[] angs) {
      ATM atm= new ATM ();
     Scanner sc = new Scanner():
Systemout printle ("Welcome to ATM Machine"):
while (true) {
  System.out println ("In o Please choose an option:")
Systemout printin ("1. Deposit")
  Systemout printin ("2. Withdraw"):
  System.out.printin ("3. check Balance :");
  System.out.printla ("4. Exit")
  System.out.pnint ("Youn choice: "):
  intchoice=scinextInt();
      to anopo por
  switch (choice) {
     case 1:
```

Systemout print ("Enten deposit amount: ");
atm. deposit (sc. next Double ());
break;

case 2:

Systemout printle ("Enter withdrawal bolance:"):

sc.next Double() atm. withdraw (): break; At 12 almost on the Parkelling Case 3: atm. check Balance (); break; 16 word at new Cace 40.000 seeds al" Jultaing two months Systemout printin ("Thank you for using oun ATM! Good bye! ") (Sastew exit(0); E.) altoud to water break; (-1. = 3. 12.) altong two mates default: word) trong twomater System.outprintln("! Invalid option-Please try again. "); Output: O Please choose an option: 1-Witt Perosit (contracto 2.Withdraw 3. Check Bolance 4. ExiL but wit not all of throng two motors

Your choice: 1 Enter deposit amount: 5000 Successfully deposited: \$5000.0 o please choose an option 1. Depocit 0 3/ 2 FS) wareness man - 25 wareness 3. Check Balance 2. W: Lhdraw () oldwood tooning = Linnun oldnik 4. Ex14 Youn choice: 24 mla +) al balage two moters Enter withdrawal amount: 1000 men states Successfully withdrawn: \$ 1000.0 o Please choose an option altang two motets 1. Daposit) waster itgittomx ") altalag two motors? 2. Withdraw . (1) warring : ") ulturad fromusts 55 3 . Check Balance 4. Exit : griods mov") althing two mote? Youn choice: 4 Thank you for using our ATM! Goodbye! 10 a-blus sasiduch sunt shilor postood

Program-9: Calculator

impontjava.util. *

public class Calculation (

Public void static main (string [] angs) {

Scannen sc= new Scannen (System.in)

System out printin ("Enten the finst number:")

double num 1 = sc. nex+ Double ();

System.out-printin ("Enten the record number!")

41.3.1

double num? = scinex+Double (): hat was 1

System.outprintin (" [Choose an Openation ");

System. out. printin ("+ Addition (+)");

Systemoutipnintln ("- Subtraction (-)")

Eastemont builto (a X Walthblication (*) ..).

System.out.pnintin(": Division (1)"):

System.out printla ("Your choice: ");

chan op=scnext(). chan A+(0);

doubtenesult = 0;

boolean valid = true;

```
Systemout printin ("Calculating: ....");
switch (op) & lang to altang two water
case 't': result = num1+num2; break;
  case '-': nesult=num1-num2; break;
  case (*1: necult= num1 * num2; break)
                    Ententhe First pumber
  Case (/):
                                          OOL
     if (num 2!=0)
                     Enter the second number
         result=num1/num2;
     +15+ {
                         [[Choose on openation:
       Sastemont. buluflu ( "x connot girige pa 0 !")
       valid = False
                              (-) nothoroddu2 -
                           (*) asitorilgitlum x
     break;
                                 (1) avistvia +
    default:
                                 Your choice.
     System outprintin ("Invalid openation selected
                              Colondating: "("
                             1 Bezult: 20000.0
     valid- false;
      Thonk you for using the colorletion! ?
```

```
if (valid).
      Eastew ont builtlu ( .. n bezult : "+ neint + ..).
    ] System out printin ("Thank you for using
                           the calculation!");
   Output:
                    Floren afterna : x1
  Enten the first number:
  100
  Enten the second number!
 200
OChoose an openation:
+ Addition (+)
 - Subtraction (-)
x Multiplication (*)
+ Division (1)
 Youn choice:
     tenago bilomat") altaing two males
 Calculating: ...
V Result: 20000.0
                            salst = bilev
Thank you for using the calculation! "
```