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Lab 08

Task 1 Bank Account

```
1
2 package lab_8;
3
4 abstract class bankAccount
5 {
6     int servic_years=10;
7     abstract int deposit(int deposit_amount);
8     abstract int withdraw(int withdraw_amount);
9
10    void show() {
11        System.out.println("Showing inside main class");
12    }
13 }
14 class checkingAccount extends bankAccount
15 {
16     int total_balance=3000;
17
18     int deposit(int deposit_amount)
19     {
20         return total_balance+deposit_amount;
21     }
22
23     int withdraw(int withdraw_amount)
24     {
25         return total_balance-withdraw_amount;
26     }
27 }
28 class savingAccount extends bankAccount
29 {
30
31     int total_balance=3000;
32
33     int deposit(int deposit_amount)
34     {
35         return total_balance+deposit_amount;
36     }
37
38     int withdraw(int withdraw_amount)
39     {
40         return total_balance-withdraw_amount;
41     }
42 }
43
44 public class task1
45 {
46     public static void main(String[] args) {
47         checkingAccount checkOBJ=new checkingAccount();
48         savingAccount saveOBJ=new savingAccount();
49
50         saveOBJ.show();
51         checkOBJ.show();
52     }
53 }
54
```

Task 1 Output

```
run:
Showing inside main class
Showing inside main class
```

Task 2

```
1
2 package lab_8;
3
4 abstract class animal
5 {
6     abstract void makesound();
7     static void dispaly_class()
8     {
9         System.out.println("This is Animal class");
10    }
11 }
12 class dog extends animal
13 {
14     @Override
15     void makesound() {
16         System.out.println("Bhao Bhao");
17     }
18 }
19
20 class cat extends animal
21 {
22     @Override
23     void makesound() {
24         System.out.println("Meoww Meoww");
25     }
26 }
27
28 public class task2
29 {
30     public static void main(String[] args)
31     {
32         dog dog1 = new dog();
33         cat cat1 = new cat();
34         dog1.makesound();
35         cat1.makesound();
36     }
37 }
```

```

19
20 class cat extends animal
21 {
22     @Override
23     void makesound() {
24         System.out.println("Meoww Meoww");
25     }
26 }
27
28 public class task2
29 {
30     public static void main(String[] args)
31     {
32         dog dogOBJ=new dog();
33         cat catOBJ=new cat();
34
35         dogOBJ.makesound();
36         catOBJ.makesound();
37     }
38 }
39

```

Task 2 output

```

run:
Bhao Bhao
Meoww Meoww

```

Task 3

```

3
4 abstract class game{
5
6     abstract void play();
7
8 }
9 class chess extends game{
10     @Override
11     void play() {
12         System.out.println("Chess game played");
13     }
14 }
15
16 class checkers extends game{
17     @Override
18     void play() {
19         System.out.println("Checkers game played");
20     }
21 }
22 public class task3
23 {
24     public static void main(String[] args) {
25         checkers checkersOBJ=new checkers();
26         chess chessOBJ=new chess();
27
28
29         checkersOBJ.play();
30         chessOBJ.play();
31     }
32 }
33

```

Task 3 output

```
run:
Checkers game played
Chess game played
```

Task 4

```
1
2 package lab_8;
3 abstract class marks
4 {
5
6     abstract int getpercentage();
7
8 }
9
10 class A extends marks
11 {
12
13     int sub1;
14     int sub2;
15     int sub3;
16     A (int sub1,int sub2,int sub3)
17     {
18         this.sub1=sub1;
19         this.sub2=sub2;
20         this.sub3=sub3;
21     }
22     int getpercentage() {
23         return ((sub1+sub2+sub3)*100)/300;
24     }
25 }
26 class B extends marks{
27     int sub4;
28     int sub5;
29     int sub6;
30     int sub7;
```

```
24
25 }
26 class B extends marks{
27     int sub4;
28     int sub5;
29     int sub6;
30     int sub7;
31     B (int sub4,int sub5,int sub6,int sub7)
32     {
33         this.sub4=sub4;
34         this.sub5=sub5;
35         this.sub6=sub6;
36         this.sub7=sub7;
37     }
38
39     int getpercentage() {
40         return ((sub4+sub5+sub6+sub7)*100)/400;
41     }
42 }
43
44 public class task4 {
45     public static void main(String[] args) {
46         A aOBJ=new A(70,60,49);
47         B bOBJ=new B(45,90,70,80);
48
49         System.out.println(aOBJ.getpercentage()+" Percentage");
50         System.out.println(bOBJ.getpercentage()+" Percentage");
51     }
52 }
53
54
```

Task 4 Output

```
run:
59 Percentage
71 Percentage
```