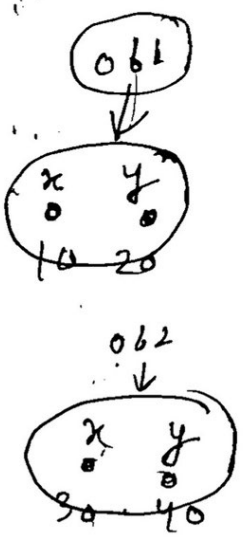
What's the o/p

8 July.

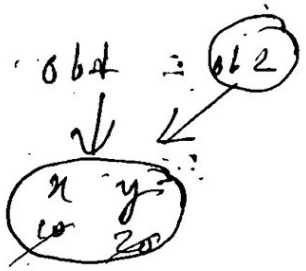
1)

```
class A
{
  int x, y;
}

class T
{
p s v m (String K[])
{
  A ob1 = new A();
  A ob2 = new A();

  sopl (ob1.x); ⇒ 0
  sopl (ob1.y); ⇒ 0
  sopl (ob2.x); ⇒ 0
  sopl (ob2.y); ⇒ 0

  ob1.x = 10;
  ob1.y = 20;
  ob2.x = 30;
  ob2.y = 40;

  sopl (ob1.x); ⇒ 10
  sopl (ob1.y); ⇒ 20
  sopl (ob2.x); ⇒ 30
  sopl (ob2.y); ⇒ 40
} }
```



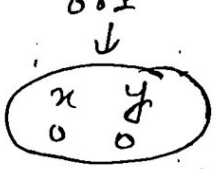
2)

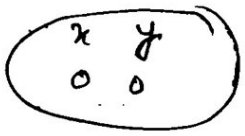
```
class A
{
  int x, y;
}

class T
{
  public static void main (String k[])
{
  A ob1 = new A();
  A ob2 = ob1;

  ob1.x = 10;
  ob1.y = 20;
  SoPL (ob1.x); → 10
  SoPL (ob1.y); → 20
  SoPL (ob2.x); → 10
  SoPL (ob2.y); → 20

  ob2.x = 90;
  ob2.y = 120;
  SoPL (ob1.x); ⇒ 90 ✓
  SoPL (ob1.y); ⇒ 120 ✓
  SoPL (ob2.x); ⇒ 90 ✓
  SoPL (ob2.y); ⇒ 120 ✓
} }
```



3)

```
class A
{
    int x, y;
}

class T
{
p s v m (String k[])
{
A ob1 = new A();
A ob2 = new A();
A ob3;
SOPL (ob1.x); → 0
SOPL (ob1.y); → 0
SOPL (ob2.x); → 0
SOPL (ob2.y); → 0
SOPL (ob3.x);
SOPL (ob3.y);
}
}
```

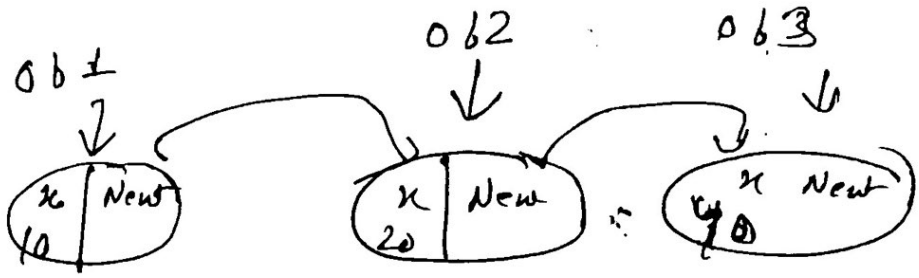




NullPointerException is occured

4)

```
class A
{
    int x;
    A Next;
}

class T
{
    p s v m(String K[])
{
    A ob1 = new A();
    A ob2 = new A();
    A ob3 = new A();
    ob1.x = 10;
    ob2.x = 20;
    ob3.x = 40;
    SOPL(ob1.x);   => 10 ✓
    SOPL(ob2.x);   => 20 ✓
    SOPL(ob3.x);   => 40 ✓
    ob1.Next = ob2;
    ob2.Next = ob3;
```



SOPL (ob2.x); ⇒ 20

SOPL (ob1.Next.x); ⇒ 20

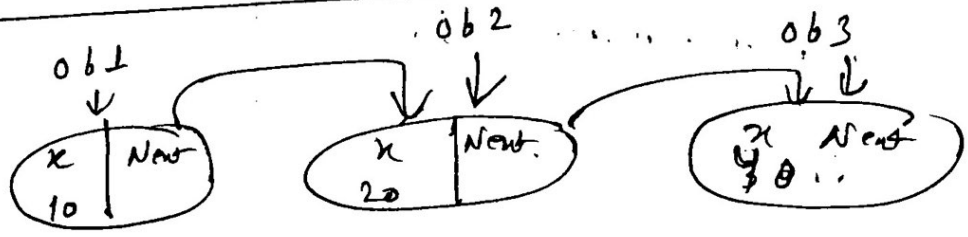
SOPL (ob3.x); → 40

SOPL (ob2.Next.x) → 40

SOPL (ob1.Next.Next.x); → 40

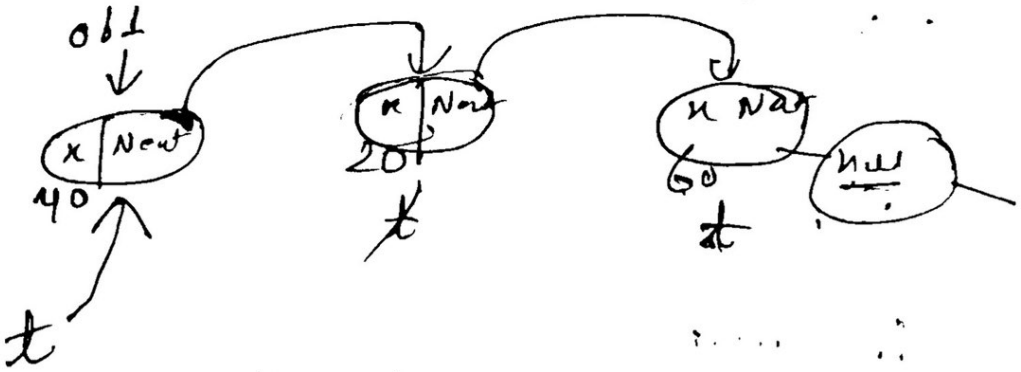
}

}

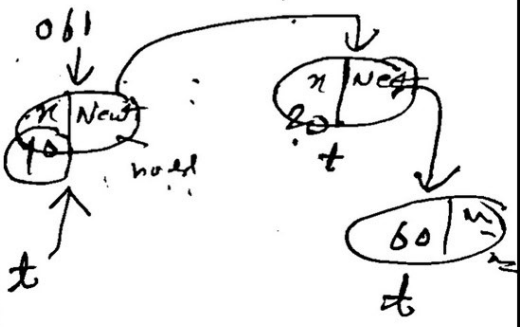


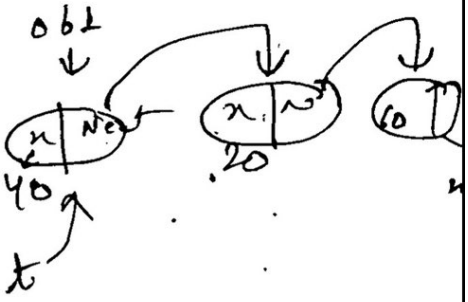
5)

```
class A
{
    int x;
    A Next;
}

class T
{
    p s v m (String K[])
    {
        A obj = new A();
        obj.x = 40;
        obj.Next = new A();
        obj.Next.x = 20;
        obj.Next.Next = new A();
        obj.Next.Next.x = 60;
        A t = obj;
```




```
while (t != null)
{
    sopl (t.x);
    t = t.Next;
}
```



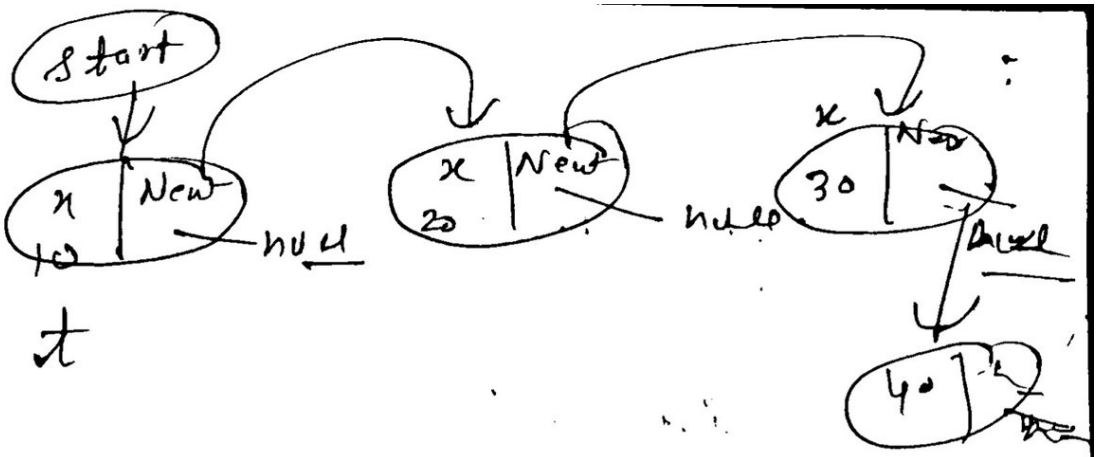


O/P

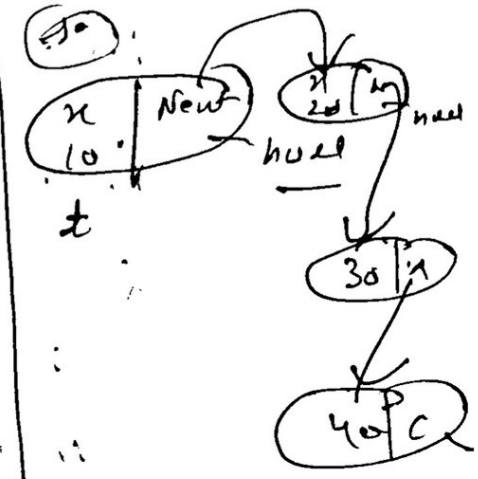
40
20
60

40 20 60

```
class A
{
    int x;
    A Next;
    A (int a)          ⇐ Constructor
    {
        x = a;
        Next = null;
    }
}

class T
{
    p s v m(String K[])
    {
    A start = new A(10);
    start.Next = new A(20);
    start.Next.Next = new A(30);
    start.Next.Next.Next = new A(40);
```

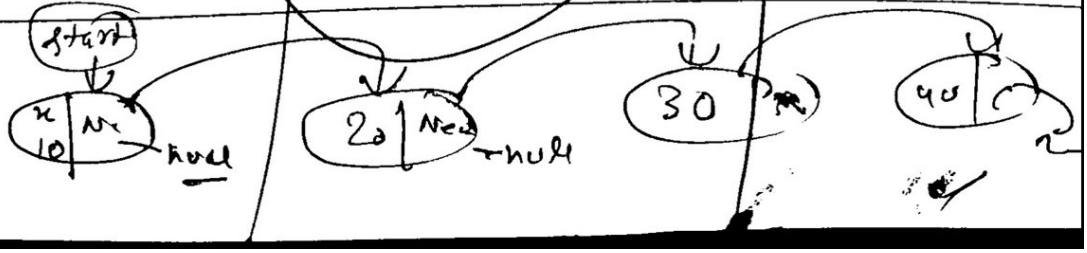



```
A  t = start;
While (t != null)
{
    sopl (t.x);
    t = t.Next;
}
}
}
```



o/p

10
20
30
40

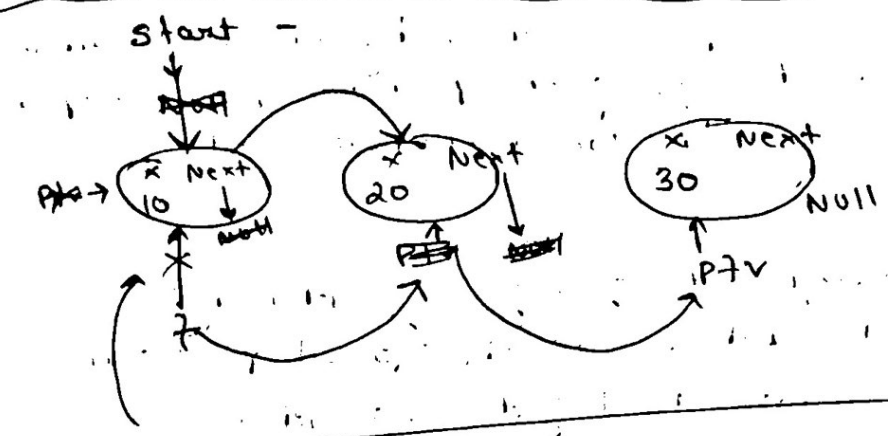


```
class Node
{
    int x;
    Node Next;
    Node (int a)
    {
        x = a;
        Next = null;
    }
}

class LinK
{
    Node start = null;
    void insert (int P)
    {
```

```
Node ptr = new Node(p);

if ( start == null)
  {
    start = ptr;
  }

else
 {
   Node t = start;
   While( t.Next != null)
   {
     t = t.Next;
   }
     t.Next = ptr;
 }

void disp ()
{
    if ( start == null)
      sopl("List is empty");
```

```
else
{
    Node t = start;
    while (t != null)
    {
        sopl (t.data);
        t = t.Next;
    }
}
}

class T
{
    p s v m (String K[])
{
    Link obj = new Link();
        obj.insert(10);
        obj.insert(20);
        obj.insert(30);
```

obj.disp();



O/P

10

20

30