Object Oriented Programming using Java

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Outline

1. Finding output of loop

Finding Output of Loop

```
class While3
{
   public static void main(String args[])
   {
      int n = 0;
      int sum = 0;
      while( n <= 6 )
      {
         sum += n++;
      }
      System.out.println("sum = " + sum);
   }
}
```

Finding Output of Loop (Cont…)

- **Output**

  21

Finding Output of Loop (Cont…)

```
class While4
{
    public static void main(String args[])
    {
        int arr[]={1,2,3,4};
        int i=3;
        while(i>=0)
        {
            System.out.println(arr[i]);
            i--;
        }
    }
}
```

Finding Output of Loop (Cont…)

- **Output**

  4

  3

  2

  1

Finding Output of Loop (Cont…)

```
class While5
{
   public static void main(String[] args)
   {
        int i = 1;
        int j = 2;
        int k = 3;
        while (i < j)
        {
            k += (i * j);
            i = i * 2;
            j--;
        }
        System.out.println("i = " + i + "," + " j = " + j + "," + " k = " + k);
    }
}
```

Finding Output of Loop (Cont…)

- **Output**

  i = 2, j = 1, k = 5

Finding Output of Loop (Cont…)

```
class While6
{
  public static void main(String[] args)
  {
     int i = 2, j = 3;
     while (i > 7 || j < 8)
     {
        i -= 2;
        j += 3;
        System.out.print(i + j + "^");
     }
  }
}
```

Finding Output of Loop (Cont…)

- **Output**

  6^7^

Finding Output of Loop (Cont…)

```
class DoWhile2
{
   public static void main(String[] args)
    {
       int x = 2, y = 3;
       do
       {
          System.out.println("Hello");
       } while (x < y);
       System.out.println("How are You");
    }
}
```

Finding Output of Loop (Cont…)

- **Output**

  Hello

  Hello

  Hello

  .

  .

  .

  .

Finding Output of Loop (Cont…)

```
class DoWhile3
{
    public static void main(String args[])
    {
       char char_arr[] = {'H', 'a', 'y', 's'};
       int x = 0;
       do
       {
          System.out.print(char_arr[x] + " ");
          x++;
       } while( x < char_arr.length);
    }
}
```

Finding Output of Loop (Cont…)

- **Output**

  H a y s

Finding Output of Loop (Cont…)

```
class DoWhile4
{
    public static void main(String args[])
    {
        int a=1;
        do
        {
            System.out.println(a);
            a++;
        }while(false);
    }
}
```

Finding Output of Loop (Cont…)

- **Output**

  1

Finding Output of Loop (Cont…)

```
import java.util.Scanner;
class DoWhile5
{
   public static void main(String[] args)
   {
      Double A, B = 0.0;
      Scanner input = new Scanner(System.in);
      do
      {
         System.out.print("Enter a number: ");
         A = input.nextDouble();
         B += A;
      }while (A != 0.0);
      System.out.println("Sum = " + B);
   }
}
```

Finding Output of Loop (Cont…)

- **Output**

  Enter a number: //user will give number

  Enter a number: //user will give number

  Enter a number: //user will give number

  When user will enter 0, sum will be calculated.

Finding Output of Loop (Cont…)

```
class For2
{
   public static void main(String[] args)
   {
      int p=4;
      for (int i = 1; i <= 1; --i)
      {
         System.out.println("Hello! Count Please");
      }
   }
}
```

Finding Output of Loop (Cont…)

- **Output**

  Hello! Count Please

  Hello! Count Please

  Hello! Count Please

  Hello! Count Please

  .

  .

  .

Finding Output of Loop (Cont…)

```
class For3
{
   public static void main(String args[])
   {
      for(int i = 0; i < 1; System.out.println("Surprize to see this Line here"))
      System.out.println("Lets see what print");
   }
}
```

Finding Output of Loop (Cont…)

- **Output**

  Lets see what print

  Surprize to see this Line here

  Lets see what print

  Surprize to see this Line here

  Lets see what print

  Surprize to see this Line here

  .

  .

  .

Finding Output of Loop (Cont…)

```
class For4
{
    public static void main(String args[])
    {
        int i = 0;
        for(; i <= 5; i++ )
        {
            System.out.println("i before the loop = " + i );
        }
        System.out.println("i after the loop = " + i );
    }
}
```

Finding Output of Loop (Cont…)

- **Output**

  i before the loop = 0

  i before the loop = 1

  i before the loop = 2

  i before the loop = 3

  i before the loop = 4

  i before the loop = 5

  i after the loop = 6

Finding Output of Loop (Cont…)

```
class Nestedloop3
{
  public static void main(String args[])
  {
    int i, j;
    for(i = 1; i <= 5; i++)
    {
      for(j = 1; j <= i; j++)
      {
         System.out.print(j + "\t");
      }
      System.out.println();
    }
  }
}
```

Finding Output of Loop (Cont…)

- **Output**

```
1
1  2
1  2  3
1  2  3  4
1  2  3  4  5
```

Finding Output of Loop (Cont…)

```
class Nestedloop4
{
    public static void main(String args[])
    {
        int i, j, k, l=10;
        for(i=0; i<5; i++)
        {
            for(k=0; k<l; k++)
            {
                System.out.print(" ");
            }
            for(j=0; j<i; j++)
            {
                System.out.print("* ");
            }
            System.out.println();
            l--;
        }

    }
}
```

Finding Output of Loop (Cont…)

- **Output**

```
*          //Some space will be there. Then, * will be printed
* *
* * *
* * * *
```

Finding Output of Loop (Cont…)

```
class Continue1
{
   public static void main(String[] args)
   {
      for (int i = 1; i <= 20; i++)
      {
         if (i % 2 == 0)
         {
            continue;
         }
         System.out.println(i + " ");
      }
   }
}
```

Finding Output of Loop (Cont…)

- **Output**

1
3
5
7
9
11
13
15
17
19

Finding Output of Loop (Cont…)

```
class Break1
{
   public static void main(String args[])
   {
      first:
      for (int i = 1; i < 6; ++i)
      {
         for (int j = 1; j < 5; ++j)
         {
           if (i == 3 || j == 2)
                break first;
           System.out.println("i = " + i + "; j = " + j);
         }
      }
   }
}
```

Finding Output of Loop (Cont…)

- **Output**

  i = 1; j = 1

thank you . . .

Slides are prepared from various sources, such as Book, Internet Links and many more.