**44-542 Object Oriented Programming**

**Arrays KEY**

1. a)

String[] a;

a = new String[14];

b)

a[13] = “Lydia”;

c)

for(int i = 0; i < a.length; i++)

{

System.out.println(a[i]);

}

d)

for(String str : a)

{

System.out.println(str);

}

2. a)

int[] numbers;

numbers = new int[20];

b)

for(int pos = 0; pos < numbers.length; pos++)

{

numbers[pos] = 3 \* pos + 1;

}

c)

for(int value : numbers)

{

System.out.print(value + " ");

}

d)

**numbers**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 1 | 4 | 7 | 10 | 13 | 16 | 19 | 22 | 25 | 28 | 31 | 34 | 37 | 40 | 43 | 46 | 49 | 52 | 55 | 58 |

3.

import java.io.\*;

import java.util.\*;

public class ArrayStuff

{

public static void main(String[] args) throws IOException

{

Scanner myFileReader = new Scanner(

new File("arrayData.txt"));

int[] numArray = new int[11];

for(int i = 0; i < numArray.length; i++)

{

numArray[i] = myFileReader.nextInt();

}

for(int i = numArray.length - 1 ; i >= 0; i--)

{

System.out.print(numArray[i] + " ");

}

System.out.println();

for(int i = 0; i < numArray.length; i++)

{

if(numArray[i] < 0)

{

System.out.print(numArray[i] + " ");

}

}

System.out.println();

for(int i = 0; i < numArray.length; i += 2)

{

System.out.print(numArray[i] + " ");

}

System.out.println();

String[] mammalArray = new String[16];

for(int i = 0; i < mammalArray.length; i++)

{

mammalArray[i] = myFileReader.next();

}

for(int i = 0; i < mammalArray.length; i++)

{

System.out.println(mammalArray[i]);

}

System.out.println();

for(int i = 0; i < mammalArray.length; i++)

{

if(mammalArray[i].charAt(0) >= 'H')

{

System.out.println(mammalArray[i]);

}

}

System.out.println();

}

}