Java Arrays

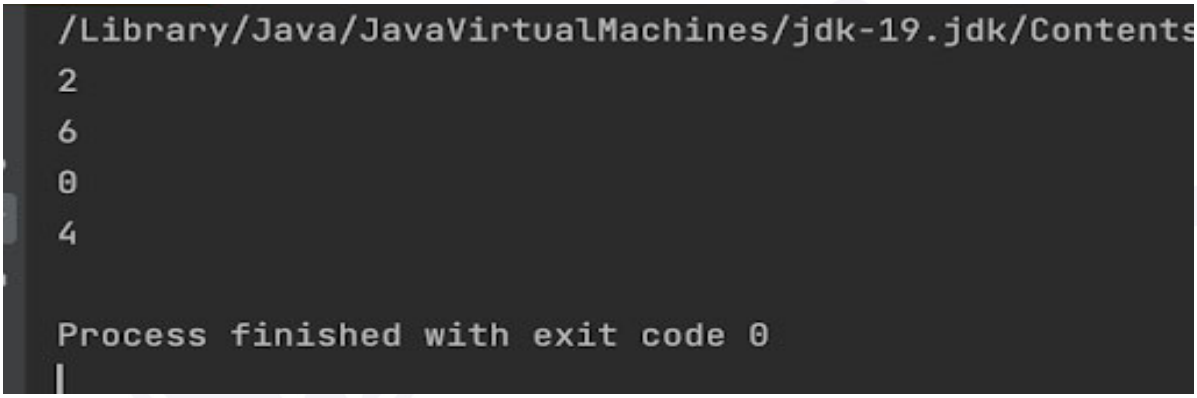
Assignment Solutions

PW SKILLS

Q1. Given an array of integers {2, 6, -5, -1, 0, 4, -9}, print only the positive values present in the array.

Output:
2
6
0
4

Code:
```
public class Test {
   public static void main(String[] args) {
       int[] arr = {2, 6, -5, -1, 0, 4, -9};
       for(int val: arr){
           if(val >= 0){
               System.out.println(val);
           }
       }
}
}
```



Q2. Convert the list of Strings {“ab”, “bc”, “cd”, “de”, “ef”, “fg”, “gh”} into an array of strings and print all strings stored on odd indices of the array.

Output:
bc
de
fg

Code:
```
public class Test {
   public static void main(String[] args) {
       String[] arr = {"ab", "bc", "cd", "de", "ef", "fg", "gh"};
       for(int i = 0; i < arr.length; i++){
           if(i % 2 != 0){
               System.out.println(arr[i]);
           }
       }
}
}
```

```
/Library/Java/JavaVirtualMachines/jdk-19.jdk/Contents/Home/bin/java -javaa
bc
de
fg

Process finished with exit code 0
```

Q3. Traverse over the elements of the array {1,2,3,4,5,6,7,8} using for each loop and print all even elements.

Output:
2
4
6
8

Code:

```
public class Test {
   public static void main(String[] args) {
       int[] arr = {1,2,3,4,5,6,7,8};
       for(int val: arr){
           if(val % 2 == 0){
               System.out.println(val);
           }
       }
}
}
```

```
/Library/Java/JavaVirtualMachines/jdk-19.jdk/Contents/Home/bin/java -java
2
4
6
8

Process finished with exit code 0
```

Q4. Calculate the minimum element in the array {2, -3, 5, 8, 1, 0, -4} using standard library method for calculating the minimum element.

Output:
-4

Code:
```
public class Test {
    public static void main(String[] args) {
       int[] arr = {1, 1, 3, 4, 2, 3, 5, 7, 0};
       for(int i = 1; i < arr.length-1; i++){
           if(arr[i-1] < arr[i] && arr[i] > arr[i+1]){
               System.out.print(arr[i]);
               break;
           }
       }
}
}
```

```
/Library/Java/JavaVirtualMachines/jdk-19.jdk/Contents
-4
Process finished with exit code 0
```

Q5. Find the first peak element in the array {1, 1, 3, 4, 2, 3, 5, 7, 0}
Peak element is the one which is greater than its immediate left neighbor and its immediate right neighbor. Leftmost and rightmost element cannot be a peak element.

Output:
4

Code:
```
public class Test {
    public static void main(String[] args) {
       int[] arr = {1, 1, 3, 4, 2, 3, 5, 7, 0};
       for(int i = 1; i < arr.length-1; i++){
           if(arr[i-1] < arr[i] && arr[i] > arr[i+1]){
               System.out.print(arr[i]);
               break;
           }
       }
}
}
```

```
/Library/Java/JavaVirtualMachines/jdk-19.jdk/Contents/Home/bin/j
4
Process finished with exit code 0
```