Week 7 Pre-reading quiz

Test your Knowledge for Week 7!

Question 1 *Submitted Apr 14th 2022 at 1:02:12 pm*

I want to discover how many integers between 1 and 1 million inclusive are divisible by 7 or 19 but not divisible by both. What kind of loop pattern is **most** appropriate?

- [x] Counter controlled
- [ ] Sentinel controlled
- [ ] Value controlled
- [ ] More than one of the above

Question 2 *Submitted Apr 14th 2022 at 1:02:24 pm*

I want to discover what integer I need to go up to, starting from 1 incrementing by 1, to find 1000 integers divisible by 7 or 19 but not divisible by both. The loop must stop after 2000 iterations. What kind of loop pattern is **most** appropriate?

- [ ] Counter controlled
- [x] Sentinel controlled
- [ ] Value controlled
- [ ] More than one of the above

Question 3 *Submitted Apr 14th 2022 at 1:02:37 pm*

If you want to find the sum of all the numbers in an array of integers, what type of Java loop is **most** appropriate?

- do-while
- while
- for
- enhanced for

Question 4 *Submitted Apr 14th 2022 at 1:03:03 pm*

Your program needs a loop that must read a value first, process and then evaluate the stop condition. What type of Java loop is **most** appropriate?

- do-while
- enhanced for
- while
- for

Question 5 *Submitted Apr 14th 2022 at 1:03:24 pm*

Consider the following code OUTLINE:

You can assume the outer loop is meant to repeat 4 times and the inner loop is meant to repeat 9 times.

k should count the total number of times "some statements" has executed. Which of the following is the **best** code location to increment **k**?

- Immediately before the outer while after declarations and initialisations
- In the outer while immediately before the inner while
- In the inner while immediately before the "inner loop statements"
- **In the inner while immediately after the "inner loop statements"**
- In the outer while immediately after the inner while
- Immediately after the outer while

Question 6 *Submitted Apr 14th 2022 at 1:04:07 pm*

The following piece of code is developed to find the maximum value in an array of integers, but, it throws a **syntax error.** Which line does the error occur on?

```
1   int ar[]={4,3,6,7};
2   int max=ar[0];
3   int index=0;
4   for(int i=0;i<ar.length;i++){
5           if (ar[i]>max)
6           max=ar[i];
7           index=max;
8       }
9   System.out.println("The max is ="+max+" in cell with index="+i);
10  }
```

- **9**
- 2
- 4
- 7

- 5
- 6

Question 7 *Submitted Apr 14th 2022 at 1:04:18 pm*

If you want to print an array in reverse order, what type of Java loop is most appropriate?

- (•) for
- while
- enhanced for
- do-while

Question 8 *Submitted Apr 14th 2022 at 1:04:31 pm*

Consider the following code which was written to find the minimum element in an array of numeric type and of any length:

What is wrong with this code? You can assume any necessary declarations and initialisations have occurred.

- It will not compile
- n1 = v[0]; should be n1 = 0;
- int i = 1 should be int i = 0
- n1 = v[i]; should be v[i] = n1

- [ ] The **if** condition should be n1 < v[i]
- [x] If you think there is nothing wrong with the code, select this option

Question 9 *Submitted Apr 14th 2022 at 1:04:46 pm*

Consider the following enhanced for loop header:

If I wanted to calculate the sum of the elements of the array mentioned in the header what would my loop statement be? You can assume an integer variable **total** has been declared and initialised correctly before the loop header.

- [ ] total += a[i];
- [x] total += a;
- [ ] total += i;
- [ ] i++;