

## Exercises on Arrays

### Programming Fundamentals 1 & 2

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For the purposes of these exercises we assume the following declaration and initialisation of an integer array, a.

```
private int[] a = {2,3,4,5,6,7,8,9,10, 11};  
    // declares and initialises a with these values
```

1. Write a method (**exer1()**) to print all the values in the array to the console, one line per number.
2. Write a method (**exer2()**) to print all the values in the array (backwards from a[9] to a[0] ) to the console, one line per number.
3. Write a method (**exer3()**) to print every second element of the array (starting at position 0), one line per number.
4. Write a method (**exer4()**) to sum all the values in the array. Print this value to the console. (total is 65)
5. Write a method (**exer5()**) to sum all the first four values in the array. Print this value to the console. (total is 14)
6. Write a method. (**exer6()** ) that prints out the **even** numbers in the array.

(Note: To check if a number n is **even** we use the check

```
if (n % 2 == 0)
```

The % operator returns the remainder after n / 2 – if there is no remainder, the number is evenly divisible by 2, or **even**. )

7. Write a method. (**exer7()** ) that sums the **even** numbers in the array. The total should be printed to the console.