

Question 1 (3 marks)

Assume you have the following variables declared and initialized

```
int x=20;  
boolean flag=true;
```

Write one single statement (i.e. line) that prints “Done” if the value of x is greater than 15 and the flag is true and prints “Error” otherwise.

```
public class Test{  
    public static void main(String[] args) {  
        int x=20;  
        boolean flag=true;  
        if (x>15 && flag)  
            System.out.println("Done");  
        else  
            System.out.println("Error");  
    }  
}
```

```
public class Test {  
    public static void main(String[] args) {  
        int x=20;  
        boolean flag=true;  
        System.out.println((x>15&&flag)? "Done": "Error");  
    }  
}
```

ternary conditional operator

expressionResult=condition? trueResult : falseResult;

Question 2 (15 marks)

Write a piece of code that takes an array of integers with length between 1 and 5 elements and prints true if the array is palindrome and false otherwise.

Note: you must not use repetition statements

Examples:

- `int ar[] = {1, 3, 1}; // true`
- `int ar[] = {1, 3, 3, 1}; // true`
- `int ar[] = {2, 1, 3, 1}; // false`
- `int ar[] = {2, 1, 3, 1, 2}; // true`
- `int ar[] = {2}; // true`
- `int ar[] = {2,1}; // false`

```
public class Test{
    public static void main(String[]args){
        boolean result;
        //array initialisation
        int[]ar={1,2,3,2,1};
        //if array only contains one element--> true
        if (ar.length==1)
            result=true;
        //if array contains 2 to 5 elements, if the first element equals to the
last and the second equals to the second last one
        else if (ar[0] == ar[ar.length - 1] && ar[1] == ar[ar.length - 2])
            result = true;
        //all other situations
        else
            result=false;
        System.out.println(result);
    }
}
```

In the code above when array is {1,2,3,2,1}, the output is true.

I also tried several other arrays as following:

When `int[]ar={1,2,1};` the output is true.

When `int[]ar={5,4,4,5};` the output is true.

When `int[]ar={2,5,6,9};` the output is false.

When `int[]ar={2};` the output is true.

When `int[]ar={1,2};` the output is false.

When `int[]ar={2,5,2};` the output is true.