

# Assignments for week 10

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5/11/2020

## **Contents**

## 1 10.1

### 1.1 10.1 - green

The variable sum has to be declared final for the Java version to work.

### 1.2 10.1 - Yellow

In Java functions needs variables to be defined in scope to be referable or be defined with no chance of pointers changing.

## 2 10.2 - green

See Kotlin10<sub>2</sub>.kt

*We add the nullable? to the string parameter for the palindrome function. And then we test the var last for being null. The action has to be done separately, since last can be null.*

```
    var last=s?.length ?: return false
    last -= 1
\end{verbatim}
```

\section{10.3}

See \texttt{Kotlin10\_3.kt} \\

\subsection{10.3.1 - green}

Done

\subsection{10.3.2 - green}

Done

\subsection{10.3.3 - Yellow}

Done

\section{10.4 - green}

See \texttt{Kotlin10\_4.kt} \\

\begin{verbatim}

```
    val seq = sequence{yieldAll(1940..2040 step 4)}
    print(seq.toList())
\end{verbatim}
```

\subsection{10.5 - green}

See \texttt{Kotlin10\_4.kt} \\

\subsection{10.6 - yellow}

See \texttt{Kotlin10\_4.kt} \\

\subsection{10.7 - green}

See \texttt{Kotlin10\_4.kt} \\

\subsection{10.8 - yellow}

See \texttt{Kotlin10\_8.kt}\\

\subsection{10.9 - Red}

Java part see \texttt{StreamExtender.java}\\

\begin{verbatim}

```
public static Stream dropEverySecond(Stream st){
    AtomicInteger index = new AtomicInteger();
    return st.filter(n -> index.incrementAndGet() % 2 == 0);
}
```

\end{verbatim}

\\

\newline

Kotlin: toSeq see \texttt{Kotlin10\_8.kt}\\

\begin{comment}

%<https://tex.stackexchange.com/questions/277560/counting-characters-in-a-section-of-a-document>

\quickwordcount{main}

\quickcharcount{main}

\todo{There are \thechar characters and approximately \theword spaces.

That makes approximately \the\numexpr\theword+\thechar\relax\ characters total.}

\end{comment}



