

Kelas: SE-48-03

Anggota Kelompok:

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\*sesuai kesepakatan dikelas, array pseudocode menggunakan index 1 bukan 0.

No	Pseudocode
1	<pre>Program Nilai Kamus     result : string     totalStudent, highestStudent , i : integer     scoreStudent : array Algoritma     input(totalStudent)     scoreSudent ← new int[totalStudent]     highestStudent ← 0      i ← 1     WHILE ( i &lt;= studentTotal ) DO         input( scoreStudent[i] )         IF ( scoreStudent[i] &gt; highestStudent) THEN             highestStudent ← scoreStudent[i]         END IF         i++     END WHILE      i ← 1     WHILE ( i &lt;= totalStudent ) DO         result ← "F"         IF ( scoreStudent[ i ] &gt;= highestStudent) THEN             result ← "A"         ELSE IF ( scoreStudent[ i ] &gt;= highestStudent - 5 ) THEN             result ← "B"         ELSE IF ( scoreStudent[ i ] &gt;= highestStudent - 10 ) THEN             result ← "C"         ELSE IF ( scoreStudent[ i ] &gt;= highestStudent - 15 ) THEN             result ← "D"         ELSE IF ( scoreStudent[ i ] &gt;= highestStudent - 20 ) THEN             result ← "E"         END IF         output("Mahasiswa ", i, " memiliki nilai ", scoreStudent[i], " dan mendapat nlai ", result)         i++     END WHILE  Endprogram</pre>

2	<p>Program Nilai</p> <p>Kamus</p> <p>    result : string</p> <p>    i : integer</p> <p>    inputScore : array</p> <p>Algoritma</p> <p>    inputScore ← new int[ 11 ]</p> <p>    i ← 1</p> <p>    WHILE ( i &lt;= 11) DO</p> <p>        input( inputScore[ i ] )</p> <p>        i++</p> <p>    ENDWHILE</p> <p>    i ← 1</p> <p>    WHILE ( i &lt;= 11 ) DO</p> <p>        result ← “sama dengan”</p> <p>        IF ( inputScore[ i ] &gt; inputScore[ 11 ] ) THEN</p> <p>            result ← “lebih besar”</p> <p>        ELSE IF ( inputScore[ i ] &gt; inputScore[ 11 ] ) THEN</p> <p>            result ← “lebih kecil”</p> <p>        END IF</p> <p>        output("\nBilangan ke-", ( i ), result, " dari bilangan ke-11")</p> <p>        i++</p> <p>    ENDWHILE</p> <p>Endprogram</p>
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3	<p>Program Membaca Nilai</p> <p>Kamus</p> <p>    userInput, userInputArray : array          numberCount, currentNumber, i : integer</p> <p>Algoritma</p> <pre> input( userInput.split(" ") ) userInputArray ← new int[userInput.length] i ← 1 WHILE ( i &lt;= userInput.length ) DO     userInputArray[ i ] ← Integer.parseInt( userInput[ i ] )     IF ( userInputArray[ i ] &lt; 0    userInputArray[ i ] &gt; 50 ) THEN         output( "Invalid input. )         return     END IF     i++ END WHILE  userInputArray ← Arrays.sort( userInputArray ) i ← 1 numberCount ← 0 currentNumber = -1 WHILE ( i &lt; userInput.length ) DO     IF ( currentNumber != userInputArray[i] &amp;&amp; currentNumber != -1 ) THEN         output( currentNumber, " muncul ", numberCount, " kali" )         numberCount ← 0     END IF      currentNumber = userInputArray[ i ]     numberCount++     i++ END WHILE output( currentNumber, " muncul ", numberCount, " kali" ) Endprogram </pre>
4	<p>Program Bilangan Prima</p> <p>Kamus</p> <p>    n, i, multipliedNumber : integer          primeNumber : array of boolean</p> <p>Algoritma</p> <pre> n ← 50 primeNumber ← new boolean[n +1] Arrays.fill( primeNumber, true ) primeNumber[ 0 ] ← false primeNumber[ 1 ] ← false  i ← 2 WHILE ( i * i &lt;= n ) DO     IF ( primeNumber[ i ] ) THEN         multipliedNumber ← i </pre>

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        WHILE ( multipliedNumber <= n ) THEN
            primeNumber[multipliedNumber] ← false
            multipliedNumber += i
        END WHILE
    END IF

    i++
END WHILE

i ← 2
WHILE ( i <= n ) DO
    IF ( primeNumber[ i ] ) THEN
        output( i, " " )
    END IF
    i++
END WHILE
Endprogram
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