

# Coursework 1

**Opened:** Thursday, 5 November 2020, 12:00 AM

**Due:** Tuesday, 24 November 2020, 9:00 AM

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For students enrolled on Principles and Applications of programming this coursework is worth 5% of your overall grade (30 credits). For students enrolled on Java for Industry this coursework is worth 20% of your final grade (15 credits).

The coursework is in 3 parts worth 20, 15 and 10 marks respectively. Additional marks will be awarded for formatting, style and commenting (5 marks). The total marks available is 50.

Submit your work as a zip file. The zip should contain 3 subfolders, one for each part of the coursework. Each subfolder should only contain the source files.

To complete the coursework the only imported libraries you should use are **java.util.ArrayList** and **java.util.Scanner**.

Please download the following file and follow the instructions carefully



[CW1.pdf](#)

11 November 2020, 12:17 PM

## Submission status

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**Submission  
status**

Submitted for grading

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**Grading  
status**

Released



**Time  
remaining**

Assignment was submitted 6 days 9 hours early

**Grading  
criteria**

<b>Private members added to Student</b>	Not attempted <i>0 points</i>	Not all members included or syntax errors <i>1 points</i>	Incorrect access modifier <i>2 points</i>	perfect <i>3 points</i>
<b>Getters and setters added to Student</b>	Not attempted <i>0 points</i>	Incomplete <i>1 points</i>	Complete <i>2 points</i>	
<b>Student Constructor</b>	Not attempted <i>0 points</i>	Incomplete <i>1 points</i>	Complete <i>2 points</i>	
<b>Grade ArrayList in Student</b>	Not attempted <i>0 points</i>	Complete <i>1 points</i>		
<b>Grade class. Properties and Constructor</b>	Not attempted <i>0 points</i>	Incomplete <i>1 points</i>	Complete <i>2 points</i>	
<b>getLetterGrade static method</b>	Not attempted <i>0 points</i>	Incomplete <i>1 points</i>	Doesn't return correct result (including <0 or >100) <i>2 points</i>	Perfect <i>3 points</i>
<b>Students and grades instantiated</b>	Not attempted <i>0 points</i>	Students created correctly <i>1 points</i>	All grades added to the students <i>2 points</i>	



Menu system	Not attempted <i>0 points</i>	Report output <i>1 points</i>	Letter grades correct for each student's report <i>2 points</i>	Outputs failed students <i>3 points</i>	Outputs average grades <i>4 points</i>	Quit program <i>5 points</i>	
Password generation	Not attempted <i>0 points</i>	Static method created <i>1 points</i>	returns a string <i>2 points</i>	password is correct length <i>3 points</i>	password include digits and symbols <i>4 points</i>	password includes upper and lower case letters <i>5 points</i>	Password in range or not <i>6 points</i>
Password validation	Not attempted <i>0 points</i>	Static method created <i>1 points</i>	returns a string , either excellent, good , ok or poor <i>2 points</i>	Correctly identifies a poor password <i>3 points</i>	Correctly identifies an ok password <i>4 points</i>	Correctly identifies a good password <i>5 points</i>	Correctly identifies a password example <i>6 points</i>
Password menu system	Not attempted <i>0 points</i>		Password generator option <i>1 points</i>		Password validator option <i>2 points</i>		Quit system correctly <i>3 points</i>
Huffman: Frequency of characters and ordering	Not attempted <i>0 points</i>		. <i>1 points</i>		. <i>2 points</i>		Input string correctly frequencies in order and ordered. <i>3 points</i>



<b>Huffman: Node Class</b>	Not attempted <i>0 points</i>	.	.	.	Node class that includes left and right children character and frequency <i>3 points</i>	
<b>Huffman: Tree class</b>	Not attempted <i>0 points</i>	.	.	.	Tree class that builds up a Huffman tree. <i>3 points</i>	Tree stores outputs codes for character <i>4 points</i>
<b>Formatting, style and commenting</b>	Not attempted <i>0 points</i>	Tidy well indented code. <i>1 points</i>	Effective commenting that enhances readability. <i>2 points</i>	Code organised using Object Oriented principles. <i>3 points</i>	Correctly chosen coding techniques <i>4 points</i>	Additional code used <i>5 points</i>

**Last modified**

Tuesday, 17 November 2020, 11:09 PM

**File submissions**

 [CW1.zip](#)

17 November 2020, 11:09 PM

**Submission comments**

▶ [Comments \(0\)](#)



## Feedback

## Grade

<b>Private members added to Student</b>	Not attempted <b>0 points</b>	Not all members included or syntax errors <b>1 points</b>	Incorrect access modifier <b>2 points</b>	perfect <b>3 points</b>
<b>Getters and setters added to Student</b>	Not attempted <b>0 points</b>	Incomplete <b>1 points</b>	Complete <b>2 points</b>	
<b>Student Constructor</b>	Not attempted <b>0 points</b>	Incomplete <b>1 points</b>	Complete <b>2 points</b>	
<b>Grade ArrayList in Student</b>	Not attempted <b>0 points</b>	Complete <b>1 points</b>		
<b>Grade class. Properties and Constructor</b>	Not attempted <b>0 points</b>	Incomplete <b>1 points</b>	Complete <b>2 points</b>	
<b>getLetterGrade static method</b>	Not attempted <b>0 points</b>	Incomplete <b>1 points</b>	Doesn't return correct result (including <0 or >100) <b>2 points</b>	Perfect <b>3 points</b>
<b>Students and grades instantiated</b>	Not attempted <b>0 points</b>	Students created correctly <b>1 points</b>	All grades added to the correct students <b>2 points</b>	

Menu system	Not attempted <i>0 points</i>	Report output <i>1 points</i>	Letter grades correct for each student's report <i>2 points</i>	Outputs failed students <i>3 points</i>	Outputs average grades <i>4 points</i>	Quits the program <i>5 points</i>	
Password generation	Not attempted <i>0 points</i>	Static method created <i>1 points</i>	returns a string <i>2 points</i>	password is correct length <i>3 points</i>	password include digits and symbols <i>4 points</i>	password includes upper and lower case letters <i>5 points</i>	Password is in a randomised order <i>6 points</i>
Password validation	Not attempted <i>0 points</i>	Static method created <i>1 points</i>	returns a string , either excellent, good , ok or poor <i>2 points</i>	Correctly identifies a poor password <i>3 points</i>	Correctly identifies an ok password <i>4 points</i>	Correctly identifies a good password <i>5 points</i>	Correctly identifies an excellent password. <i>6 points</i>
Password menu system	Not attempted <i>0 points</i>		Password generator option <i>1 points</i>		Password validator option <i>2 points</i>		Quit system option <i>3 points</i>
Huffman: Frequency of characters and ordering	Not attempted <i>0 points</i>		. <i>1 points</i>		. <i>2 points</i>		Input string character frequencies identified and ordered. <i>3 points</i>



Huffman: Node Class	Not attempted <i>0 points</i>	.	.	Node class that includes left and the right children as well as character and frequency <i>3 points</i>		
Huffman: Tree class	Not attempted <i>0 points</i>	.	.	Tree class that builds up a Huffman tree. <i>3 points</i>	Tree stores / outputs Huffman codes for each character <i>4 points</i>	
Formatting, style and commenting	Not attempted <i>0 points</i>	Tidy well indented code. <i>1 points</i>	Effective commenting that enhances readability. <i>2 points</i>	Code organised using Object Oriented principles. <i>3 points</i>	Correctly chosen coding techniques <i>4 points</i>	Additional, complex techniques used. <i>5 points</i>

78 / 100

**Graded on** Tuesday, 22 December 2020, 2:32 PM

**Graded by**



Edward Anstead

◀ week 5: Methods

Jump to...

[Lecture Slides Week 5: Importing Libraries and the Scanner class ▶](#)