SIT102 – Introduction to Programming

Answers for 1.1P Hello World

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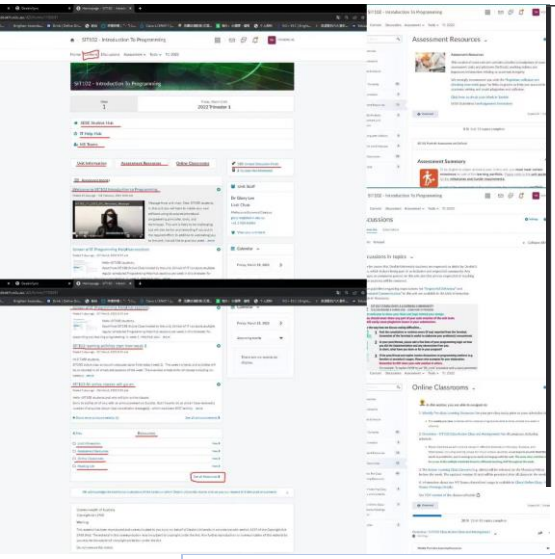
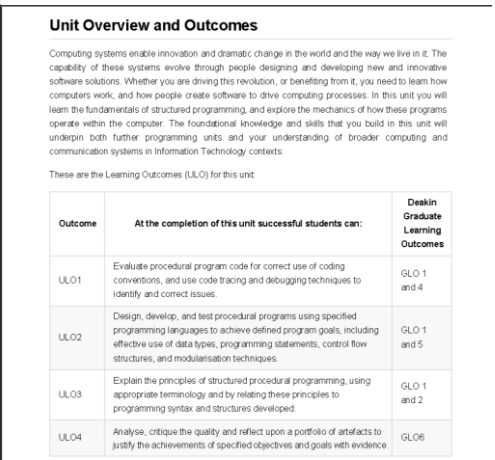
About your study in this unit:

Question 1: Based on Week 0 Unit Chair's message(s) with the latest unit arrangement (See SIT102 Unit Site Home >> Announcements section), where is the resources/information for **Weekly Learning Resources and SIT102 Tx 202x Active Class Schedule** are available? **Demonstrate that you've got their location(s) in the Unit Site, in the following answer box.**

What to demonstrate here? Think about what is asked by this question. It asks for the Unit Site location that you have reached for **Weekly Learning Resources and Active Class Schedule.** By common sense, the unit site path(s) to reach them, screenshot(s) of your browser showing their contents in one of your visits, *or* other alternatives that show you've got/visited the corresponding location(s) could be a piece of **valid and concise evidence** for addressing the question.



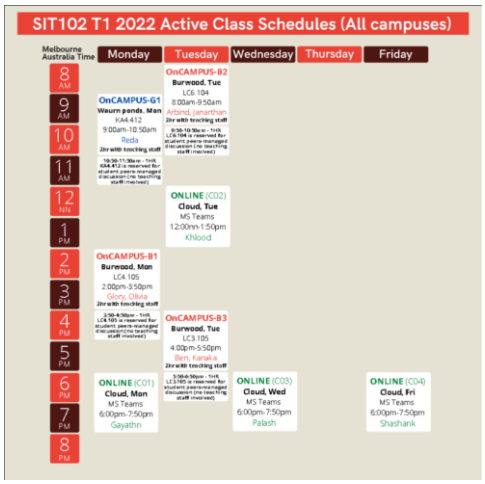


Unit Overview and Outcomes

Computing systems enable innovation and dramatic change in the world and the way we live in it. The capability of these systems evolve through people designing and developing new and innovative software solutions. Whether you are driving this revolution, or benefiting from it, you need to learn how computers work, and how people create software to drive computing processes. In this unit you will learn the fundamentals of structured programming, and explore the mechanics of how these programs operate within the computer. The foundational knowledge and skills that you build in this unit will underpin both further programming units and your understanding of broader computing and communication systems in Information Technology contexts.

These are the Learning Outcomes (ULO) for this unit:

Outcome	At the completion of this unit successful students can:	Deakin Graduate Learning Outcomes
ULO1	Evaluate procedural program code for correct use of coding conventions, and use code tracing and debugging techniques to identify and correct issues.	GLO 1 and 4
ULO2	Design, develop, and test procedural programs using specified programming languages to achieve defined program goals, including effective use of data types, programming statements, control flow structures, and modularisation techniques.	GLO 1 and 5
ULO3	Explain the principles of structured procedural programming, using appropriate terminology and by relating these principles to programming syntax and structures developed.	GLO 1 and 2
ULO4	Analyse, critique the quality and reflect upon a portfolio of artefacts to justify the achievements of specified objectives and goals with evidence.	GLO6



Question 2: Based on the Unit Guide (Get its pdf at SIT102 Unit Site >> Unit Information section) and/or other Unit Information and Assessment resources, what are **Pass** TASK dues and MIESLTONE checkpoint dues respectively for your OnTrack **Pass** tasks? In other words, what

are you required to do for fulfilling the **hurdle Pass tasks completeness requirement** by TASK dues and MIESLTONE dues **respectively**?

Pass task: Complete and pass the assignment requirements with the instructor's signature. Students must complete-submit each assignment, meet all appropriate assignment requirements, indicate due feedback, and if feedback is received from the instructor to revise/revisit/resubmit the assignment, the assignment must be revised to meet the minimum expected standards of the assignment requirements and demonstrate understanding of the relevant concepts and learning outcomes." The "due date" means that the assignment must be submitted by this date and cannot be resubmitted after this date. And corrections/revisions/resubmissions must be completed by the milestone deadline.
Milestone: Assignments in the Milestone Completion Plan provide a reflection of progress on track over a three-month period. Unit assignment submissions, feedback and responses will be made through OnTrack. In many cases, work will need to be corrected and resubmitted to meet sufficient standards to demonstrate the desired outcome achievement of the portfolio before it can be signed off as a completed assignment, possibly more than once, and as part of this process, assignments need to be submitted as close to the due dates and milestones as possible.
Milestone 1: Weeks 1 through 3 of the assignment by the end of Week 5.
P Milestone 1 Checkpoints and Self-Reflection
Start Date - Aim to start this task by March 21.
Due Date - Aim to complete by April 10th.
Milestone 2: By the end of week 7, complete weeks 4-5 of the assignment.
P Milestone 2 Checkpoints and Self-Reflection
Start date - Aim to start this task by Monday, April 4.
Due date - Aim to complete by May 1.
Milestone 3: By the end of Week 10, students will need to complete Weeks 6 through 8,.
P Milestone 3 Checkpoints and Self-Reflection
Start date - Aim to start this task by Monday, May 2.
Due Date - Aim to complete by Sunday, May 22.
Final Milestone Checkpoint: By the end of Week 11, students will need to complete the Week 9 pass assignment, completed through feedback from the tutor on the student's on-time submission. The final trimester, at which the unit is eligible for a pass, requires that the student has submitted the Ayer pass assignment (including a draft learning summary report for 10.1p).
P Final Milestone Checkpoint and Self-Reflection
Start Date - Aim to begin this task by Monday, May 9.
Due Date - Aim to complete by May 29th.

Question 3: Take 1.1P Hello World as a Pass task example, when will be its TASK due and MILESTONE due date **respectively**? (Check it out at 1.1P OnTrack Task dashboard > Task Details. You could do the same for getting details of other Pass tasks.)

Start Date — Aim to start this task by Mon 7 Mar.
Due Date — Aim to complete by Thu 17 Mar.

P Milestone 1 Checkpoints and Self-Reflection
Start Date - Aim to start this task by March 21.
Due Date - Aim to complete by April 10th.

Question 4: Complete the following statements by filling in the four dates.

a) 1.2P should be submitted to OnTrack by __(24/3/2022)__ for review and feedback from the instructor. Thereafter, any necessary redo/discussion/presentation/submission should be addressed by(10/4/2022)_ in order to be eligible for sign-off as complete.
P Milestone 1 Checkpoints and Self-Reflection
Start Date - Aim to start this task by March 21.
Due Date - Aim to complete by April 10th.

b) 2.1P should be submitted to OnTrack by **__ (24/3/2022)__** for tutors to review and provide feedback. After that, any required Redo/Discuss/Demo/Resubmit should be addressed by(10/4/2022)_in order to be eligible for a sign-off as Complete status.
P Milestone 1 Checkpoints and Self-Reflection
Start Date - Aim to start this task by March 21.
Due Date - Aim to complete by April 10th.

Question 5: Your OnTrack unit tasks are the contents of your portfolio. They are the artefacts to reflect your achievements (in your portfolio) aligning to the unit learning outcomes along the trimester.

Based on SIT102-Tx_202x-Portfolio Assessment Details document (Get its pdf at SIT102 Unit Site >> Assessment Resources section) on how your portfolio will be evaluated at the end of the trimester, what are the three listed factors for determining your awarded grade and mark? Provide them in the following answer box.

At the end of the unit, you will summarise your completed tasks and learning summary report into your learning portfolio and submit it for a final summative mark. In the portfolio assessment, your final grade and mark for this unit is determined by the following factors:. The quality of the tasks you have completed and submitted attached to the portfolio, the completion and status of the tasks in OnTrack, and the reasons for your reflections included in your learning summary report and task reflections.

Question 6: [Set up your goal for the unit achievements] What grade are you going to aim for, and why? Please share the reason(s) to us.

I hope I was able to get a D in this unit, I think learning any programming language requires a solid foundation of being able to understand and have some insight in that area.

If you aim for Credit or above, you are highly suggested to

- also read through Final Unit Results – Credit Results, Distinction Results, High Distinction Results of SIT102-Tx_202x-Portfolio Assessment Details document (Get its pdf at SIT102 Unit Site >> Assessment Resources section)**, and**
- get yourself understand **NO Milestone due is applied to Credit, Distinction, and High Distinction OnTrack tasks** since they have already been given more time (compared to Pass tasks) for you to submit for tutor's feedback. Check their corresponding TASK dues in OnTrack dashboard. Milestone (checkpoint) is only applied to OnTrack Pass tasks.

About your understanding of the weekly topics:

Question 7: How does the **cd** command help when using the Terminal?

The "cd" command stands for "change directory" and this allows you to open different directories or folders on your hard drive. When you open a terminal you will be in your home directory. To move around the file system you will use cd.

Question 8: "skm clang++ program.cpp -o HelloWorld" – What does this command do? What do the different parts of the command represent **respectively**?

The skm is the setup project Run the following command in the terminal to initialize the project and prepare it for your use in Visual Studio Code.
Compile your program.cpp code and generate a program named a.out by default (a.exe on Windows) / You can change the name of the program it generates by passing an extra flag to the compiler. By adding -0 HelloWorld, you are telling the compiler to output a program named HelloWorld.

Question 9: What does a compiler do? Why is it needed?

A "compiler" is primarily used to convert source code from a high-level programming language to a low-level language (such as assembly language, object code, or machine code) to create an executable program.

Question 10: How intelligent is your computer? Elaborate how does that impact the software creation?

In fact our computers are not smart and (CPU) can only perform very simple operations Input devices provide data from user operations that can be used by the CPU. The output device can be displayed in a terminal or graphics window. For example, a monitor, a car, etc. But computers cannot understand human-like instructions, they are just a basic machine. So what we do is build on these instructions, the programming language allows

us to write code, and then we need a tool, a compiler, to convert the code into an actual program that you can run. Learn the language syntax and turn your ideas into code that the compiler can understand Remember, writing code needs to follow the language syntax exactly, the computer is not intelligent and needs to be told everything.

-- End of questions (10) --