# Knowledge Assessment: Scripting techniques

## Criteria

### Unit code, name and release number

ICTPRG405 - Automate processes (1)

### Qualification/Course code, name and release number

ICT40118 Certificate IV in Information Technology

## Student details

### Student number

### Student name

Isaac Sherwood

## Assessment Declaration

* This assessment is my original work and no part of it has been copied from any other source except where due acknowledgement is made.
* No part of this assessment has been written for me by any other person except where such collaboration has been authorised by the assessor concerned.
* I understand that plagiarism is the presentation of the work, idea or creation of another person as though it is your own. Plagiarism occurs when the origin of the material used is not appropriately cited. No part of this assessment is plagiarised.

### Student signature and Date

Isaac Sherwood 15/06/2020

Version: 1.0

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For queries, please contact:

Technology and Business Services SkillPoint

Ultimo College

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## Assessment instructions

Table 1 Assessment instructions

| Assessment details | Instructions |
| --- | --- |
| **Assessment overview** | The objective of this assessment is to assess your knowledge of the unit. |
| **Assessment Event number** | 3 of 3 |
| **Instructions for this assessment** | This is a written assessment which will be assessing you on your knowledge of the unit.  This assessment has one part and includes an Assessment Checklist and Assessment Feedback form:   1. Short answer questions.   **Check the Assessment checklist to ensure that you’ve covered all the required tasks.** |
| **Submission instructions** | On completion of this assessment, you are required to upload it to the Learning Management System or hand it to your assessor for marking.   * Complete each of your assessment events and save your files with the event name and your own name – for example: Event1\_john\_smith. * Upload your assessment event files and any other additional attachments to the space provided in the online learning platform.   Note: If your assessment event requires you to use a different file naming convention (i.e. an organisation’s file naming convention), place this file name in the footer of the document then upload the file using the naming convention stated above.  Ensure you have written your name at the bottom of each page of this assessment.  Submit the following documents for each part:   * Part 1: Short answer questions   + This document.   It is important that you keep a copy of all electronic and hardcopy assessments submitted to TAFE and complete the assessment declaration when submitting the assessment. |
| **What do I need to do to achieve a satisfactory result?** | To achieve a satisfactory result for this assessment, all questions must be answered correctly and all items in the Assessment Checklist must be marked Satisfactory. |
| **What do I need to provide?** | * A personal computer with internet access * A word processor e.g. Microsoft Word * USB drive or other storage method to save work to, with at least 500KB free space. |
| **What will the assessor provide?** | * Access to the Learning Management System. |
| **Due date/time allowed** | Indicative time to complete assessment:   * One hour. |
| **Assessment location** | This assessment may be completed outside of the classroom. |
| **Supervision** | This is an unsupervised, take-home assessment. Your assessor may ask for additional evidence to verify the authenticity of your submission and confirm that the assessment task was completed by you. |
| **Assessment feedback, review or appeals** | Appeals are addressed in accordance with [Every Student’s Guide to Assessment](https://www.tafensw.edu.au/documents/60140/76288/Every+Students+Guide+to+Assessment+in+TAFE+NSW.pdf/cc2b5417-89a6-08f7-9a67-a0c2ff1e26ee). |

## Part 1: Short answer questions

Read each question carefully and write or type your answer into the box below each question.

1. Explain the tools you would use and how you would debug your script for the following types of errors (minimum 75 maximum 150 words):
   1. A logic error, where the program runs successfully but doesn’t give the correct result
   2. A syntax error, which crashes the program.
2. Describe at least three principles (features) that are important for an algorithm to have. How would you apply these principles in your programming/scripting? (minimum 75 maximum 150 words)
3. The following flowchart outlines the process for selecting and listing the company salespeople whose sales figures are at least $1000 for the month – the selected people will then receive bonuses.

Describe two errors or omissions in the flowchart that will cause it to run or output incorrectly (minimum 25 maximum 75 words):

Start

Read sales file

Sales > 1000?

No

Yes

Process bonus

End

1. Using examples from your code, describe two Python statements. For each, answer the following (minimum 40 maximum 100 words total):
   1. What is its purpose?
   2. What is the correct syntax for using it?
2. Using examples from your code, describe two scripting techniques/constructs, for example, using functions. For each, answer the following (minimum 50 maximum 150 words total):
   1. What is its purpose?
   2. How did you use this technique in your program?

## Appendix 1: Assessment Checklist

The following checklist will be used by your assessor to mark your performance against the assessment criteria of your submitted assessment. Use this checklist to understand what skills and/or knowledge you need to demonstrate in your submission. All the criteria described in the Assessment Checklist must be met. The assessor may ask questions while the submission is taking place or if appropriate directly after the task has been submitted.

Table 2: Assessment Checklist

| TASK/STEP # | Instructions | S | U/S | Assessor Comments |
| --- | --- | --- | --- | --- |
| **Part 1.1** | Provides an appropriate answer that is a minimum 75 and maximum 150 words |  |  | *Assessors are to record their comments in sufficient detail to demonstrate their judgement of the student’s performance against the criteria.* |
| **Part 1.2** | Provides an appropriate answer that is a minimum 75 and maximum 150 words |  |  |  |
| **Part 1.3** | Provides an appropriate answer that is a minimum 25 and maximum 75 words |  |  |  |
| **Part 1.4** | Provides an appropriate answer that is a minimum 40 and maximum 100 words total |  |  |  |
| **Part 1.5** | Provides an appropriate answer that is a minimum 50 and maximum 100 words total |  |  |  |

## Assessment Feedback

*NOTE: This section* ***must*** *have the assessor signature and student signature to complete the feedback.*

### Assessment outcome

Satisfactory

Unsatisfactory

### Assessor feedback

Has the Assessment Declaration been signed and dated by the student?

Are you assured that the evidence presented for assessment is the student’s own work?

Was the assessment event successfully completed?

If no, was the resubmission/re-assessment successfully completed?

Was reasonable adjustment in place for this assessment event?  
*If yes, ensure it is detailed on the assessment document.*

Comments:

### Assessor name, signature and date:

### Student acknowledgement of assessment outcome

Would you like to make any comments about this assessment?

### Student name, signature and date

Isaac Sherwood 15/06/2020

***NOTE: Make sure you have written your name at the bottom of each page of your submission before attaching the cover sheet and submitting to your assessor for marking.***