**BAIT3273 Tutorial 11**

**Azure Security**

• Encryption

• Certificates

• Certificates for HTTPS/TLS

**Instructions**

• Please use this document to answer all the questions in this tutorial.

• Rename the file with your student code and tutorial group number. For example, 1909846-BAIT3273-S1-2020-Tut1-RDSG01 with RDSG01 as your respective programme and group number. Besides, replace *XXXXXXXX* at the header with your student code.

• Every student must submit this doc individually at the end of the tutorial to google classroom.

**Task 1: Encryption**

For most organizations, data is the most valuable and irreplaceable asset. Encryption serves as the last and strongest line defense in a layered security strategy.

Contoso Shipping knows that encryption is the only protection its data has once it leaves the data center and is stored on devices that could potentially be hacked or stolen.

What is encryption?

Encryption is the process of making data unreadable and unusable to unauthorized viewers. To use or read the encrypted must be decrypted, which requires the use of a secret key. There are two top-level types of encryption: symmetric and asymmetric.

1.a

• Distinguish the different between **Symmetric** encryption and **Asymmetric** encryption?

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| --- |
| Answer: |

• Now open Chrome and type in the TARUC URL address.

<https://www.tarc.edu.my/>

Can you find any information on the security of the connection?

Tips: You can get to Chrome’s Developer Tools by opening the Chrome menu (⋮), then going to **More Tools -> Developer Tools**. Select the **Security** Tab.

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| Answer: |

• Which protocols are used on application layer?

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| Answer: |

• Who is the issuer of the certificate and how long is it valid?

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| Answer: |

Which cipher suite is used?

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| --- |
| Answer: |

**Task 2: Certificates for HTTPS/TLS**

2.

Now, using Google Chrome, try two other sites that should be secure:

(a) First, the website of the Commonwealth: https://www.commonwealthofnations.org/ What happens? Does it work? Lets try http://www.commonwealthofnations.org/

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| --- |
| Answer: |

(b) Second, try a secure website and see if we can still change it. Open https://www.pm.gov.au/

Is this page shown to the secure?

|  |
| --- |
| Answer: |