

Prior Knowledge Checkpoint 2: Introduction to Programming

Version 1: Visual basic

Task 1: Hello Word.

- Local and open Visual Studio IDE.
- Start a new Visual Basic Console Application Project. Name the project CP21HelloWorld
- Insert code that prints "Hello World by your name".
- Run the program correcting any errors
- Copy and paste your code in to a text file. Save the file as **CP2 Answer File("Your initials")**
- Save and close the project

Task 2: Threading in Visual Basic

Below is an example which exemplifies a basic threading setup

```
Imports System.Threading

Module Module1

    Sub Main()
        Console.WriteLine("Main thread starts.")

        For i As Integer = 0 To 10
            Console.WriteLine("Sleep for 2 seconds.")
            Thread.Sleep(2000)
        Next

        Console.WriteLine("Main thread exits.")
        'Application stops for 5 seconds before closing
        Thread.Sleep(5000)
    End Sub

End Module
```

- Start a new Visual Basic Console Application Project.
- Name the project CP22ThreadingDemo
- Add the code above,
- Run the program correcting any errors
- Take a screen print of the console while the program is running.
- Insert the screen print into your answer file.
- Experiment with different time delays
- Copy and paste your code in to your answer file
- Save and close the project
- Save your answer file in portable document format (PDF) and submit for marking

Prior Knowledge Checkpoint 2:

Introduction to Programming

Version 2: Python

Python is a very simple language, and has a very straightforward syntax. It encourages programmers to program without prepared code. The simplest directive in Python is the "print" directive - it simply prints out a line.

Task 1: Hello Word.

- Open the Python IDE, start a new project and add a new python file
- Insert a simple line of code that prints "Hello World"
- Run the program
- Copy and paste your code in to a text file. Save the file as **CP2 Answer File("Your initials")**
- Save and close the project

Task 2: Threading in Python:

Below is an example which exemplifies a basic threading setup

```
#Threading in Python

import time
from threading import Thread

def myfunc(i):
    print ("\nsleeping 5 sec from thread %d" % i)
    time.sleep(5)
    print("\nfinished sleeping from thread %d" % i)

for i in range (10):
    t = Thread(target=myfunc, args=(i,))
    t.start()

#End of code
```

- Start a new project
- Name the project CP22ThreadingDemo
- Add the code above
- Run the program correcting any errors
- Take a screen print of the python console while the program is running.
- Insert the screen print into your answer file.
- Experiment with different time delays
- Copy and paste your code in to your answer file
- Save and close the project
- Save your answer file in portable document format (PDF) and submit for marking