**Coding in Minecraft – Advanced Coding Using Python**

**Lesson 6 – Errors**

**Assessment Challenge Worksheet**

|  |  |
| --- | --- |
| **Name:** |  |

**Instructions**

Complete the below tables for each of the Assessment Challenges and upload your completed file to the student portal.

**Assessment Challenge 1 - Find the syntax errors:**

def on\_chat():

    agent.teleport\_to\_player()

    agent.set\_item(BLACK\_WOOL, 64, 1)

    agent.set\_item(WOOL, 64, 2)

    agent.move(FORWARD, 1

    i = 0

    while i < 9:

        for i0 in range(5):

            agent.move(FORWARD, 1)

            agent.set\_slot(1)

            agent.place(BACK)

            agent.move(FORWARD, 1)

            agent.set\_slot(2)

            agent.place(BACK)

        if i % 2 == 0:

            agent.turn(LEFT\_TURN)

        else:

            agent.turn(right\_turn)

        agent.move(FORWARD, 1)

        if i % 2 == 0:

            agent.turn(LEFT\_TURN)

        else:

            agent.turn(RIGHT\_TURN)

        agent.move(FORWARD, 1)

        i += 1

        i += 1

player.chat("chess", on\_chat)

In the above code there are 3 syntax errors.

Can you identify them and provide a resolution to the errors?

For your answer please complete the table below:

|  |  |  |  |
| --- | --- | --- | --- |
| **Error Number** | **Line number of syntax error** | **Description of syntax error** | **How to fix syntax error** |
| 1 |  |  |  |
| 2 |  |  |  |
| 3 |  |  |  |

**Assessment Challenge 2 - Find the semantic errors:**

def on\_chat():

    agent.teleport\_to\_player()

    agent.move(FORWARD, 1)

    agent.set\_assist(PLACE\_ON\_MOVE, False)

    agent.set\_assist(DESTROY\_OBSTACLES, True)

    for i in range(6):

        for j in range(4):

            agent.move(FORWARD, 4)

            agent.turn(LEFT\_TURN)

        agent.move(UP, 2)

player.on\_chat("house", on\_chat)

You want your code to build the basic 4 walls of a house (each wall is 5 blocks high and 5 blocks long) for you to manually complete later.

The basic algorithm for your code is as follows:

* Move the agent to the players position
* Move the agent forward by 1
* Set the agent to place blocks when the move
* Set the agent to destroy any blocks in their way
* Loop around for each level of the house, moving up
* one level on the Y axis after each iteration
* Loop around to place 5 blocks for the wall
* Turn left

In the above code there are 3 semantic errors.

Can you identify them and provide a resolution to the errors?

For your answer please complete the table below:

|  |  |  |  |
| --- | --- | --- | --- |
| **Error Number** | **Line number of syntax error** | **Description of semantic error** | **How to fix semantic error** |
| 1 | 4 |  |  |
| 2 | 6 |  |  |
| 3 | 10 |  |  |