# AS91076 and AS91075“Construct and Implement a plan to program a Minecraft Agent to complete a basic task”





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Due Date: 29/11/2017

# Table of Contents

[AS91076 and AS91075 “Construct and Implement a plan to program a Minecraft Agent to complete a basic task”](#_Toc499720926)

[Table of Contents](#_Toc499720927)

[Project Brief](#_Toc499720928)

[Planning and Implementation](#_Toc499720929)

[Variables:](#_Toc499720930)

[Plan](#_Toc499720931)

[Coding](#_Toc499720932)

[Testing .](#_Toc499720933)

## Project Brief

Please insert your brief statement in the following box

The task that my agent will undertake is to measure the distance between one wall and another

#

# Planning and Implementation

## Variables:

Please insert the variables you are using for your program here.

|  |  |  |
| --- | --- | --- |
| **VariableName** | **Type** | **Purpose** |
| dist | Number | To store the total distance between |
| go | Boolean | Let’s the while loop know if the end has been reached |
|  |  |  |
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##

# Plan

This Section needs to be completed independently in order to get Merit or higher

Please use Google Draw to construct a flowchart that displays your programming plan

On chat command “**run**”

Call the function “doTeleportAgentToPlayer”

Say to screen “Agent is ready to start measuring”

Set go to true

Set dist to 0

Comment: go is a Boolean variable, dist is a number variable

While go is true do

 If Agent detects a block in front of it then

 Set go to false

 Comment: terminates the While loop

 End

 Agent moves forward by 1

 Change dist by 1

 Comment: calculates the distance to wall

End

Say “Agent has finished measuring”

Say “The distance is:” dist

Comment: displays the distance to the wall

End

Function doTeleportAgentToPlayer

Teleport the Agent to the player

End

# Coding

This Section needs to be completed independently in order to get Merit or higher.

Please paste your program code with comments here:



? comment: calls a function to teleport the agent to the player

? comment: go is a Boolean variable used to terminate the while loop when the agent detects a block in front of it.

? comment: dist is a number variable used to record the distance to the wall

Etc.

# Testing.

Create a table here showing how you are going to test your application

|  |  |  |  |
| --- | --- | --- | --- |
| Test Scenario | Expected input and output | What actually happened | What need to be fixed |
| Testing that the agent will stop when it hits a wall | agent goes forward until it hits into a wall | agent stopped in its tracks and didn’t move forward | Change true to false in while statement |
| Does the agent measure distance correctly | Agent finds wall | Distance is displayed | Worked dist was displayed as 3. I measured it as 3. |
| Etc. |  |  |  |
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| --- | --- | --- | --- |
| Test Scenario | Boundary Input | What actually happened | What need to be fixed |
| A cow or other animal is in the agent’s way | There is not a clear run to the wall | Agent when through the animal | No fix needed |
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| --- | --- | --- | --- |
| Test Scenario | Invalid Input | What actually happened | What need to be fixed |
| The agent is in a flat world | There is no wall | Agent went on and on until stopped | Nothing this was expected but the user should know how to stop the program |
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