COMP0002: Principles of Programming [T1] 23/24

Coursework 1 C Programming

**The commands needed to compile and run the program.**

gcc -o ccp main.c graphics.c

./ccp | java -jar .\drawapp-2.0.jar

**A concise description of what the program does and how much have completed.**

I complete the stages 1-4. The robot will go from home(blue grid) and moving around the edge. When move onto a marker(gray grids), It will pick it up and keep update the marker’s colour on the background.

All the positions of home, blocks and markers are typed in the source code. If numbers of blocks or markers are changed, the constant numMark or numBlock should also be changed.

All the positions finally used of markers and blocks are stored in

int grid[9][9]

Positions of the home and the robot are stored in the struct directly.

struct position robot

struct position home

After picked up all the markers, the robot will go back to home according to the former steps.

int movementRecord[100]

Another integer defined to record the number of steps and it also become a pointer so there is no C-pointer used in the code.