

ALGORITMA DAN PEMROGRAMAN
PERULANGAN DAN PENGAMBILAN KEPUTUSAN



oleh :

FEBRI LAILIAN IKHSANUDIN

NIM : L200190079

PROGRAM STUDI INFORMATIKA
FAKULTAS KOMUNIKASI DAN INFORMATIKA
UNIVERSITAS MUHAMMADIYAH SURAKARTA
TAHIN 2019

KEGIATAN 4

The image displays two screenshots of the GvR - Worldbuilder software interface, showing a robot's path and a code editor.

Top Screenshot:

- World Editor:** A 16x13 grid with a red path. The path starts at (3,2), moves up to (3,9), right to (8,9), down to (8,3), left to (4,3), and back down to (4,2). A robot icon is at (3,2). A status bar at the bottom indicates "Robots position is 3 2 N and carrying 4 beepers".
- Code Editor:** Contains the following code:

```
1 do 7:  
2   move  
3   if next_to_a_beeper:  
4     pickbeeper  
5   do 3:  
6     turnleft  
7   do 4:  
8     move  
9     if next_to_a_beeper:  
10      pickbeeper  
11     if front_is_blocked:  
12       do 2:  
13         turnleft  
14       do 4:  
15         move  
16         if right_is_clean:  
17           do 3:  
18             turnleft  
19         else:  
20           turnleft  
21           do 7:  
22             move  
23             do 2:  
24               turnleft  
25 turnoff
```
- Robot turned off dialog:** A small dialog box with a lightbulb icon and the text "Robot turned off". It has "Close", "Execute", and "Abort" buttons.

Bottom Screenshot:

- World Editor:** The same 16x13 grid, but with blue dots representing beepers. The red path is still visible. The robot icon is at (3,2). The status bar at the bottom indicates "Robots position is 3 2 N and carrying 0 beepers".
- Code Editor:** Contains the following code:

```
1 robot 3 2 n 0  
2 wall 2 3 E  
3 wall 2 4 E  
4 wall 2 5 E  
5 wall 2 6 E  
6 wall 2 7 E  
7 wall 2 8 E  
8 wall 2 9 E  
9 wall 3 9 N  
10 wall 4 9 N  
11 wall 5 9 N  
12 wall 6 9 N  
13 wall 7 9 N  
14 wall 7 9 E  
15 wall 7 8 E  
16 wall 7 7 E  
17 wall 7 6 E  
18 wall 7 5 E  
19 wall 7 4 E  
20 wall 7 3 E  
21 beepers 3 6 1  
22 beepers 5 3 1  
23 beepers 7 4 1  
24 beepers 6 9 1  
25 wall 4 2 N  
26 wall 5 2 N  
27 wall 6 2 N  
28 wall 7 2 N
```