

ALGORITMA DAN PEMROGAMAN

FUNGSI



Disusun Oleh:

NURMA TRISNAWATI

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TEKNIK INFORMATIKA

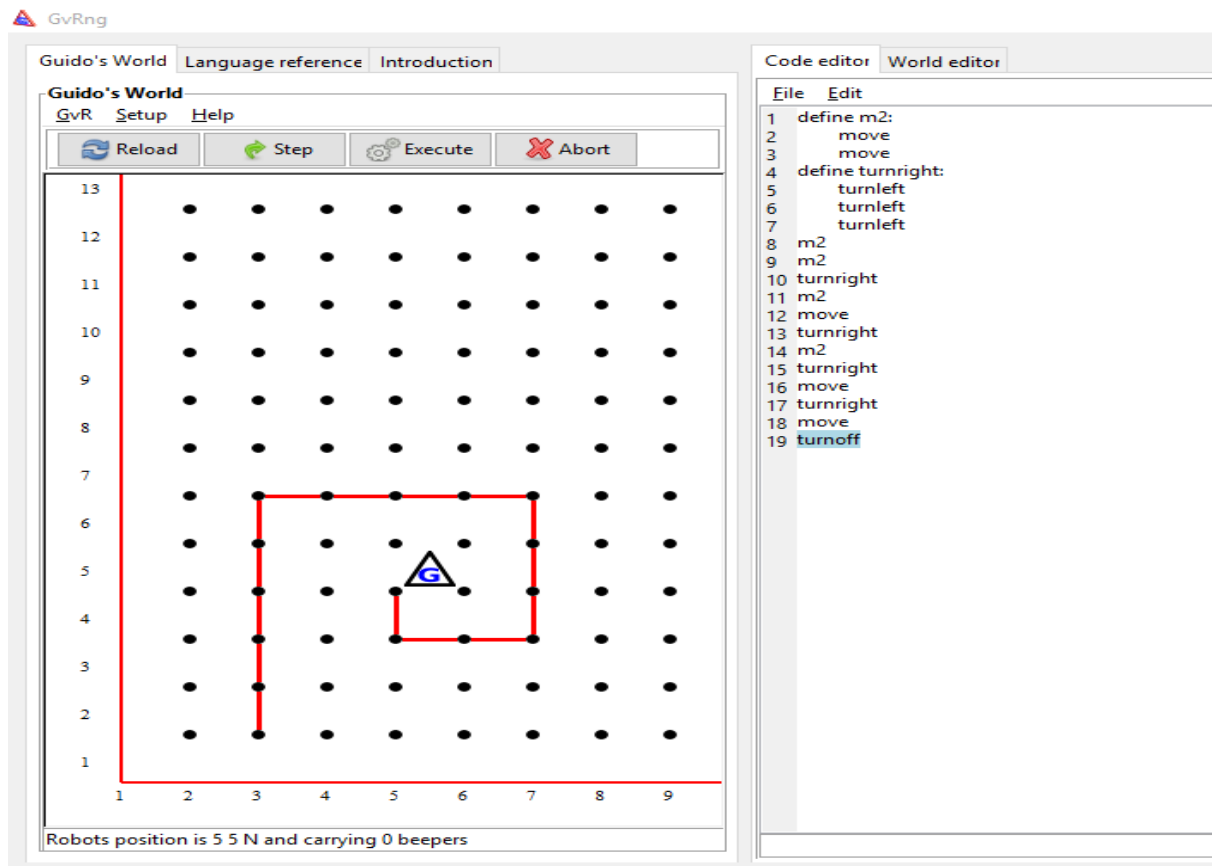
FAKULTAS ILMU KOMUNIKASI DAN INFORMATIKA

UNIVERSITAS MUHAMMADIYAH SURAKARTA

TAHUN 2019 / 2020

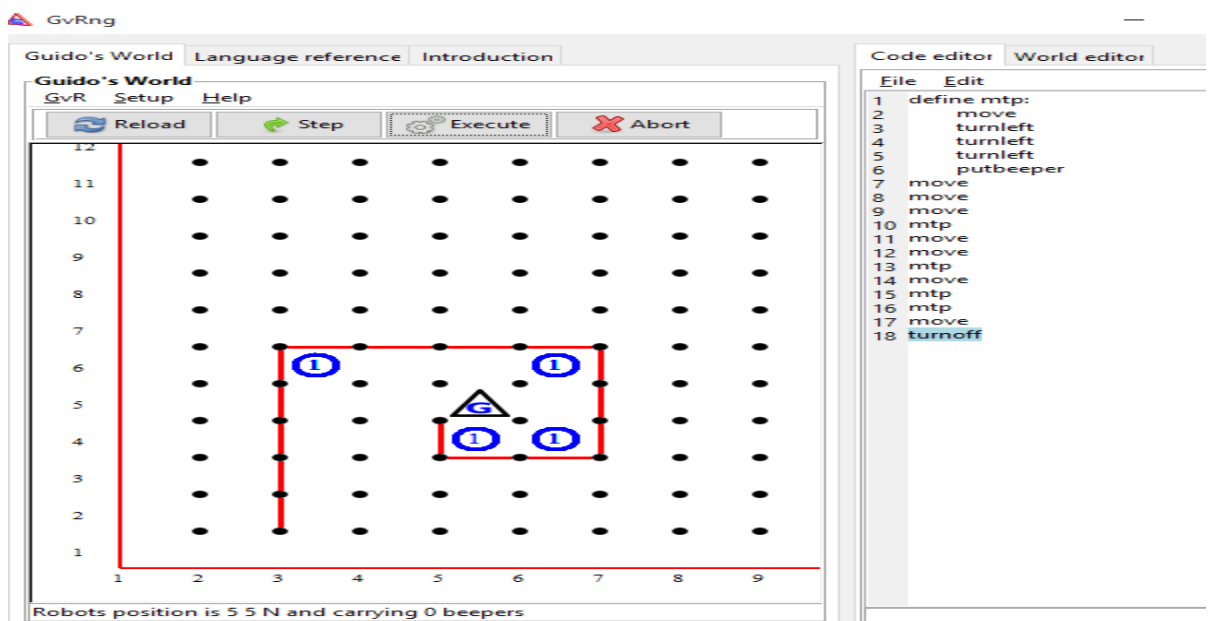
Kegiatan 1.

Berikut adalah program (tidak lebih dari 20 baris) yang saya buat:



Kegiatan 2.

Berikut adalah program (tidak lebih dari 19 baris) yang saya buat:

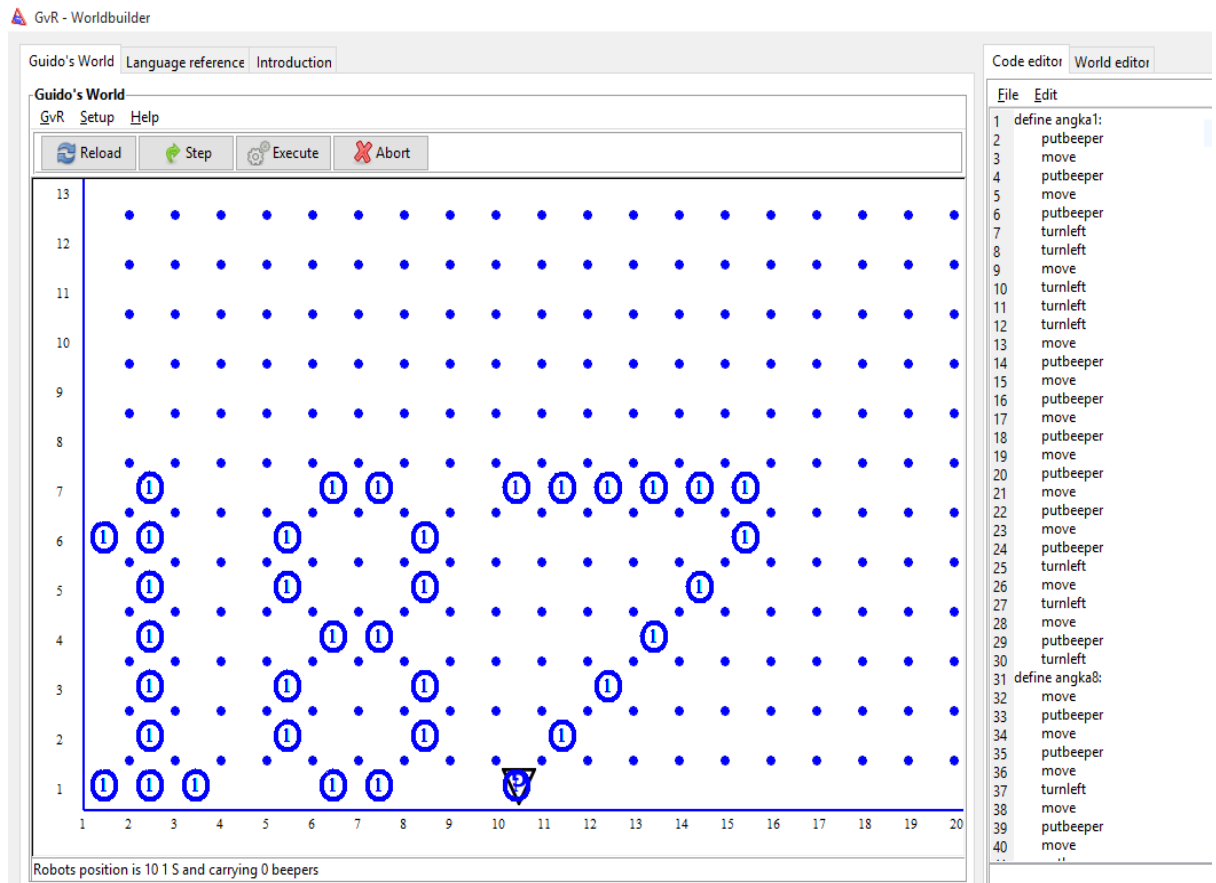


Kegiatan 3.

Jumlah Beeper pada program saya: 36

Jumlah baris instruksi pada program sesuai template: 157

Berikut adalah screenshot dari window GvRng setelah program dijalankan:



Guido's World Language reference Introduction

Guido's World
GvR Setup Help

Reload Step Execute Abort

Robots position is 10 1 S and carrying 0 beepers

Code editor World editor

File Edit

```

40 move
41 putbeeper
42 move
43 turnleft
44 move
45 putbeeper
46 move
47 putbeeper
48 move
49 turnleft
50 move
51 putbeeper
52 move
53 putbeeper
54 turnleft
55 turnleft
56 move
57 move
58 turnleft
59 turnleft
60 turnleft
61 move
62 move
63 move
64 turnleft
65 move
66 putbeeper
67 move
68 putbeeper
69 move
70 turnleft
71 move
72 putbeeper
73 move
74 putbeeper
75 move
76 turnleft
77 move
78 putbeeper
79 move
80 putbeeper

```

Guido's World Language reference Introduction

Guido's World
GvR Setup Help

Reload Step Execute Abort

Robots position is 10 1 S and carrying 0 beepers

Code editor World editor

File Edit

```

79 move
80 putbeeper
81 define angka7:
82 putbeeper
83 move
84 turnleft
85 move
86 putbeeper
87 move
88 turnleft
89 turnleft
90 turnleft
91 move
92 putbeeper
93 turnleft
94 move
95 turnleft
96 turnleft
97 turnleft
98 move
99 putbeeper
100 turnleft
101 move
102 turnleft
103 turnleft
104 turnleft
105 move
106 putbeeper
107 move
108 turnleft
109 move
110 putbeeper
111 move
112 putbeeper
113 turnleft
114 move
115 putbeeper
116 move
117 putbeeper
118 move
119 putbeeper

```

Guido's World

Language reference

Introduction

Guido's World

GvR

Setup

Help

Reload

Step

Execute

Abort

Robots position is 10 1 S and carrying 0 beepers

Code editor

World editor

File

Edit

```

121 putbeeper
122 move
123 putbeeper
124angka1
125move
126turnleft
127turnleft
128turnleft
129move
130move
131move
132move
133move
134turnleft
135move
136move
137move
138angka8
139move
140move
141move
142move
143turnleft
144move
145move
146move
147move
148move
149angka7
150turnleft
151move
152move
153move
154move
155move
156move
157turnoff

```

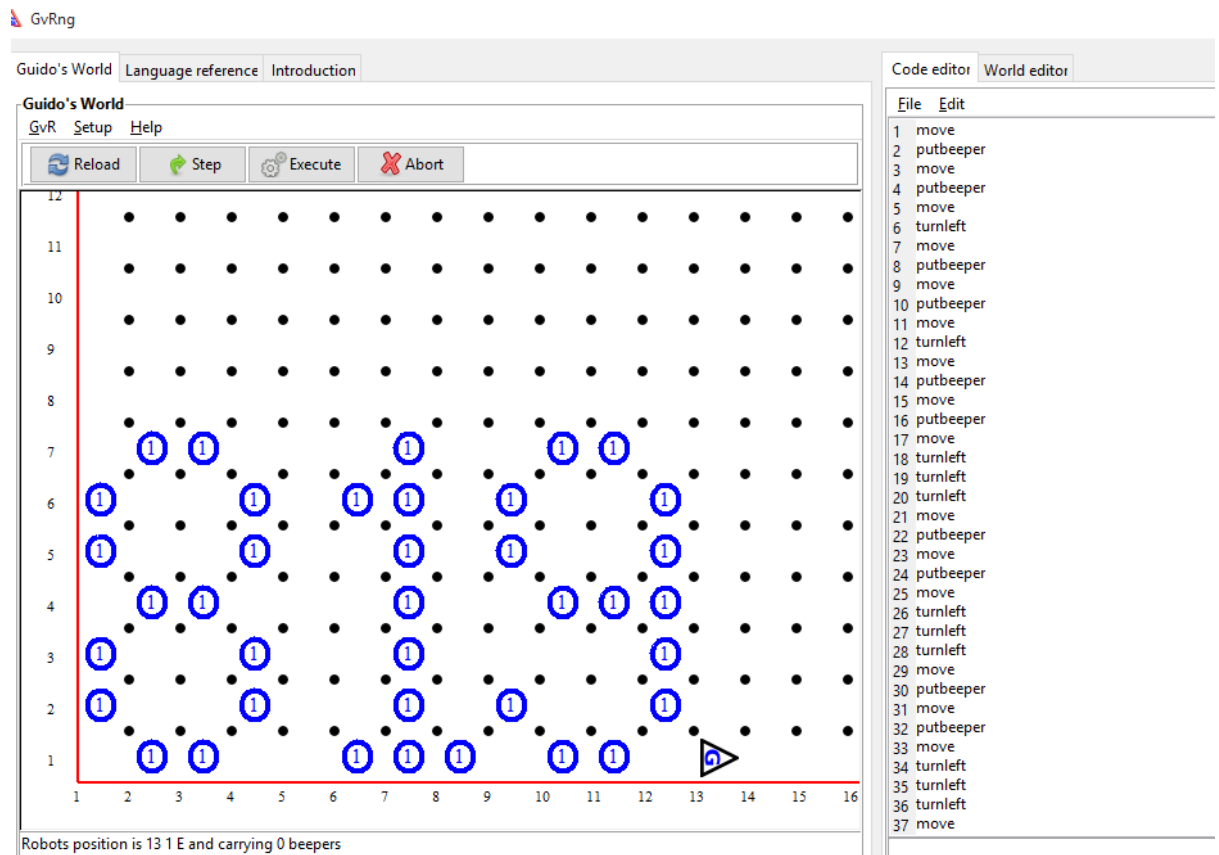
Kegiatan 4.

Jumlah baris instruksi pada program sesuai template: 150

Jumlah baris instruksi setelah menggunakan fungsi hadapkanan: 104

Jumlah baris instruksi setelah menggunakan fungsi gerakletak: 104

Program sesuai template:



GvRng

Guido's World Language reference Introduction

Guido's World

GvR Setup Help

Reload Step Execute Abort

Robots position is 13 1 E and carrying 0 beepers

Code editor World editor

File Edit

```

37 move
38 putbeeper
39 move
40 putbeeper
41 move
42 turnleft
43 turnleft
44 turnleft
45 move
46 move
47 move
48 turnleft
49 move
50 putbeeper
51 move
52 putbeeper
53 move
54 turnleft
55 move
56 move
57 move
58 move
59
60 move
61 putbeeper
62 move
63 putbeeper
64 move
65 putbeeper
66 turnleft
67 turnleft
68 move
69 turnleft
70 turnleft
71 turnleft
72 move
73 putbeeper

```

GvRng

Guido's World Language reference Introduction

Guido's World

GvR Setup Help

Reload Step Execute Abort

Robots position is 13 1 E and carrying 0 beepers

Code editor World editor

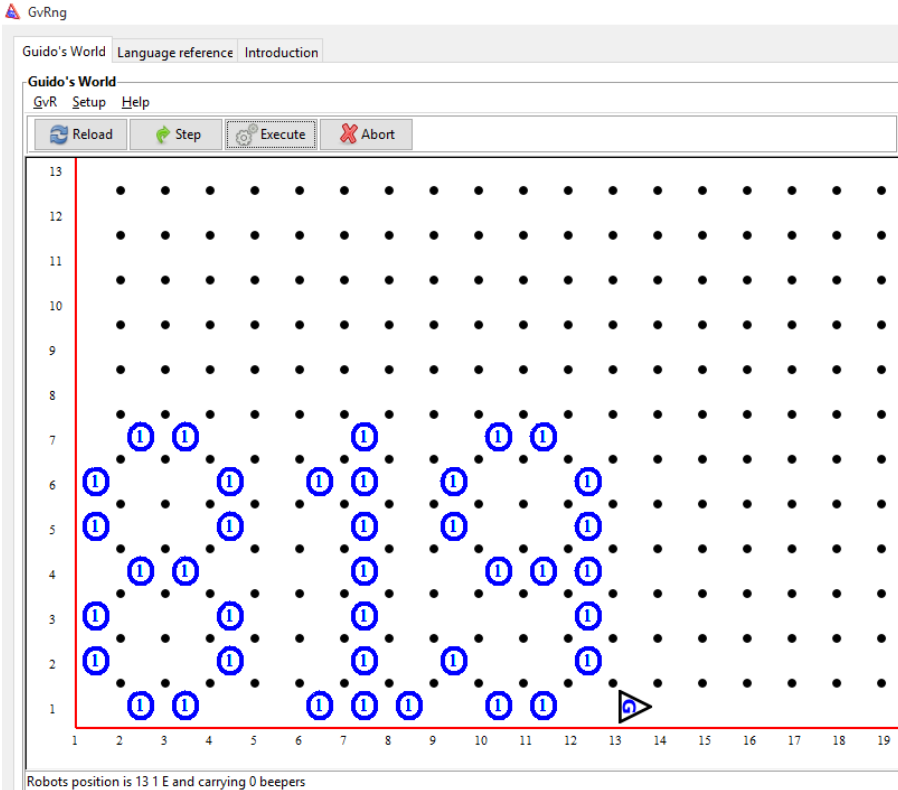
File Edit

```

73 move
74 putbeeper
75 move
76 putbeeper
77 move
78 putbeeper
79 move
80 putbeeper
81 move
82 putbeeper
83 turnleft
84 move
85 turnleft
86 move
87 putbeeper
88 move
89 turnleft
90 move
91 move
92 move
93 putbeeper
94 turnleft
95 move
96 putbeeper
97 move
98 turnleft
99 turnleft
100turnleft
101move
102putbeeper
103move
104putbeeper
105move
106turnleft
107turnleft
108turnleft
109move

```


Program setelah menggunakan fungsi gerakletak dan hadap kanan:

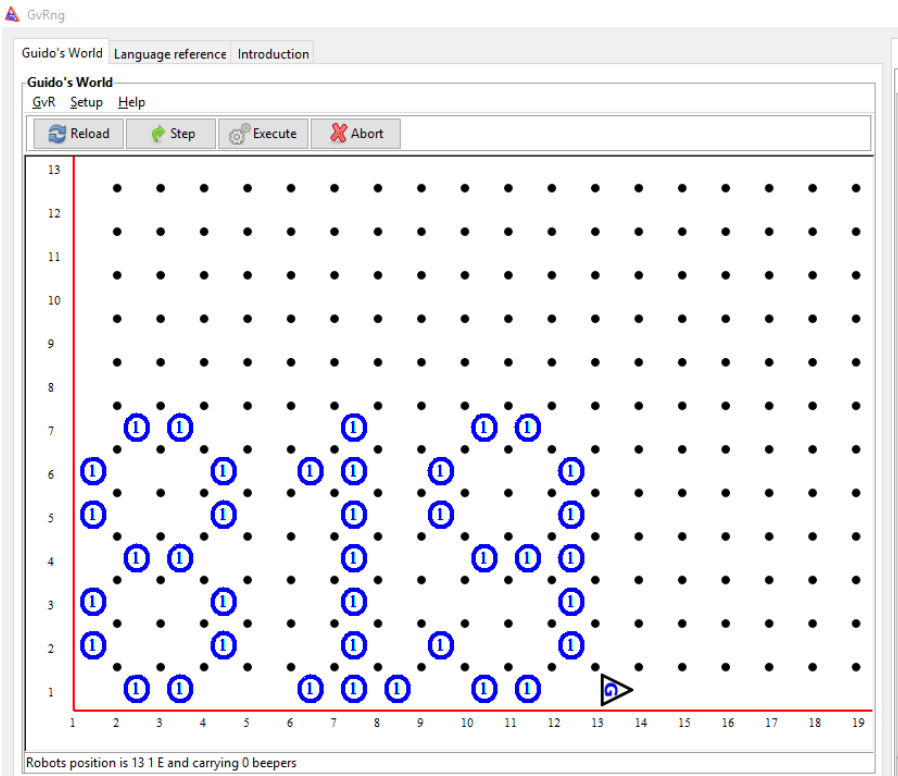


Robots position is 13 1 E and carrying 0 beepers

```

1  define gerakletak:
2      move
3      putbeeper
4  define hadapkanan:
5      turnleft
6      turnleft
7      turnleft
8  define angka8:
9      gerakletak
10     gerakletak
11     move
12     turnleft
13     gerakletak
14     gerakletak
15     move
16     turnleft
17     gerakletak
18     gerakletak
19     move
20     hadapkanan
21     gerakletak
22     gerakletak
23     move
24     hadapkanan
25     gerakletak
26     gerakletak
27     move
28     hadapkanan
29     gerakletak
30     gerakletak
31     move
32     hadapkanan
33     move
34     move
35     move
36     turnleft
37     gerakletak
38     gerakletak
39  define angka1:
40     gerakletak

```

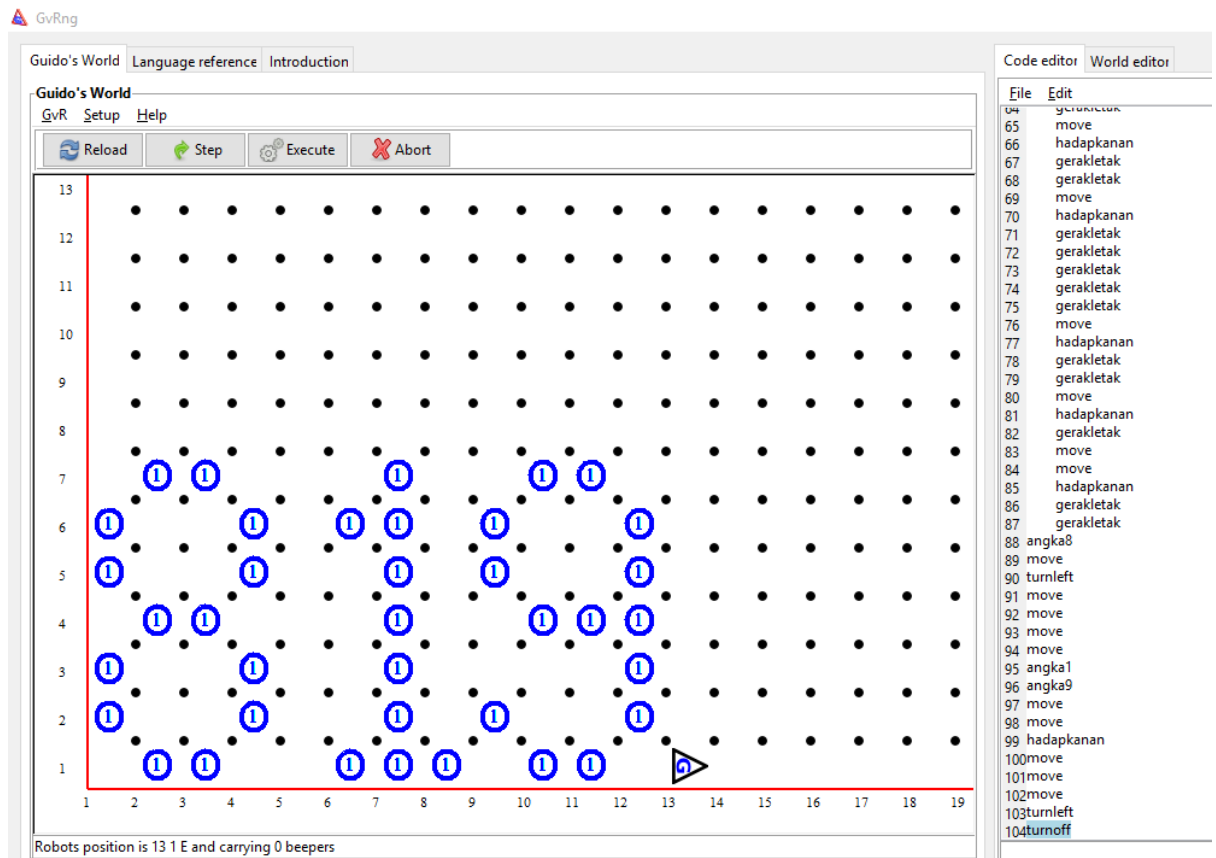


Robots position is 13 1 E and carrying 0 beepers

```

39  define angka1:
40     gerakletak
41     gerakletak
42     gerakletak
43     turnleft
44     turnleft
45     move
46     hadapkanan
47     gerakletak
48     gerakletak
49     gerakletak
50     gerakletak
51     gerakletak
52     gerakletak
53     turnleft
54     move
55     turnleft
56     gerakletak
57     move
58     turnleft
59     move
60     move
61  define angka9:
62     gerakletak
63     turnleft
64     gerakletak
65     move
66     hadapkanan
67     gerakletak
68     gerakletak
69     move
70     hadapkanan
71     gerakletak
72     gerakletak
73     gerakletak
74     gerakletak
75     gerakletak
76     move
77     hadapkanan
78     gerakletak

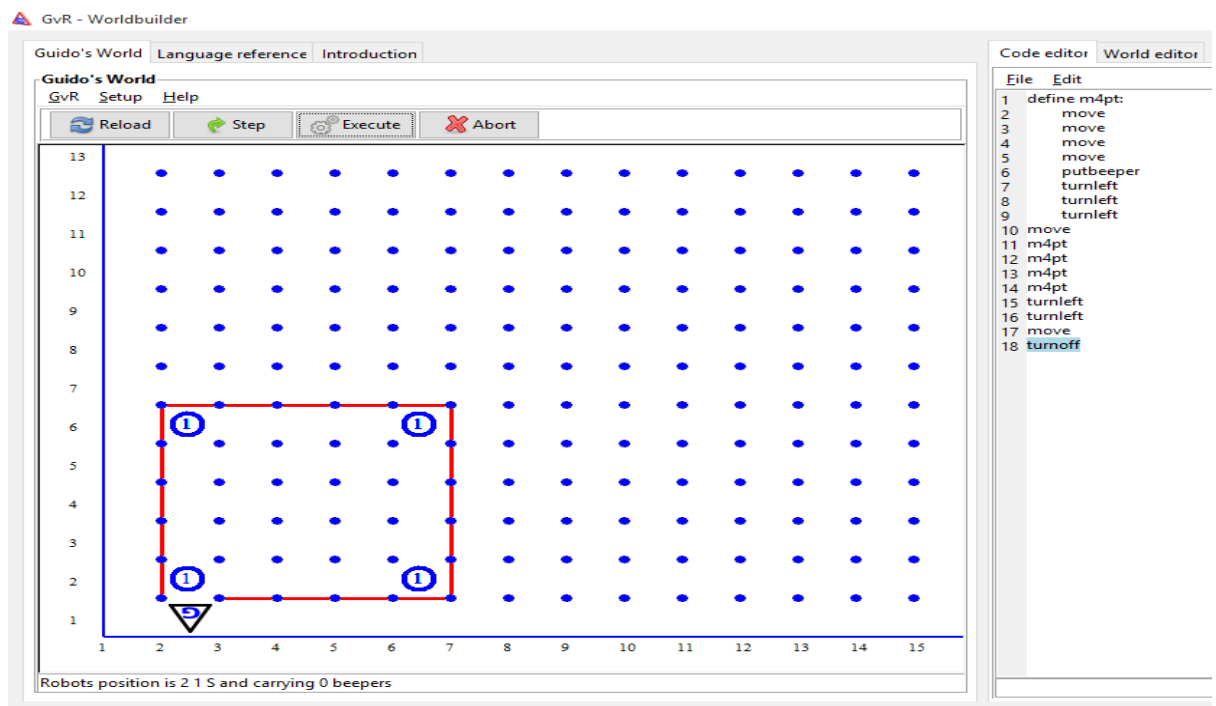
```



Kegiatan 5.

Jumlah baris instruksi pada program saya: 18

Berikut adalah program (maksimal 20 baris) yang saya buat:



Kegiatan 6.

Jumlah baris instruksi pada program saya: 33

Berikut adalah program yang saya buat:

