## 1 Dynamic Programming

## 1.1 Introduction

Dynamic programming is a method of computing the optimal result.

The main question as following:

- The minimal path of a graph
- The plan of parts in a production
- others'

## 1.2 Pseudo code

```
Algorithm 1 Euclid's algorithm
                                                                                         ⊳ The g.c.d. of a and b
  1: procedure EUCLID(a, b)
         r \leftarrow a \bmod b
  2:
  3:
         if condition ok then
              then do it
  4:
         end if
  5:
                                                                                 \triangleright We have the answer if r is 0
         while r \neq 0 do
  6:
              a \leftarrow b
  7:
  8:
              b \leftarrow r
              r \leftarrow a \bmod b
  9:
         end while
 10:
11:
         return b
                                                                                                 ⊳ The g.c.d. is b
12: end procedure
```

data1	data2	data3
sex	10	3
hell	9	6

表 1: algorithm's table

## 1.3 Flowchart



图 1: algorithm's flowchart

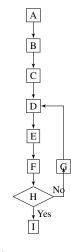


图 2: flowchart2

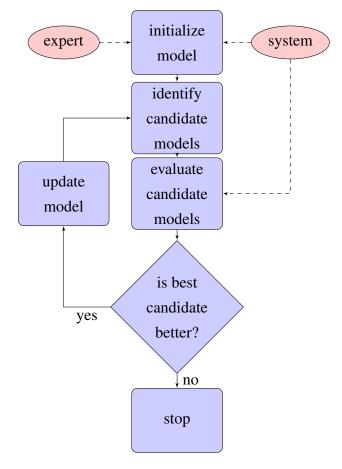


图 3: flowchart3

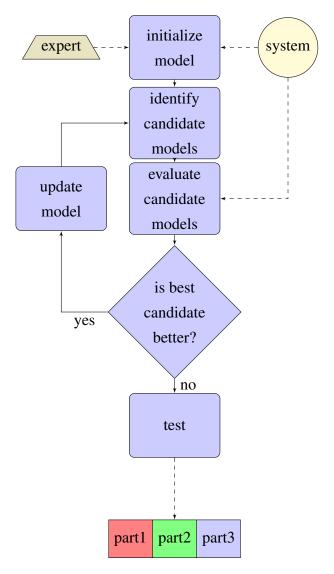


图 4: flowchart4