

# Work on project. Stage 3/5: Total recall

Project: [Honest Calculator](#)

## Total recall

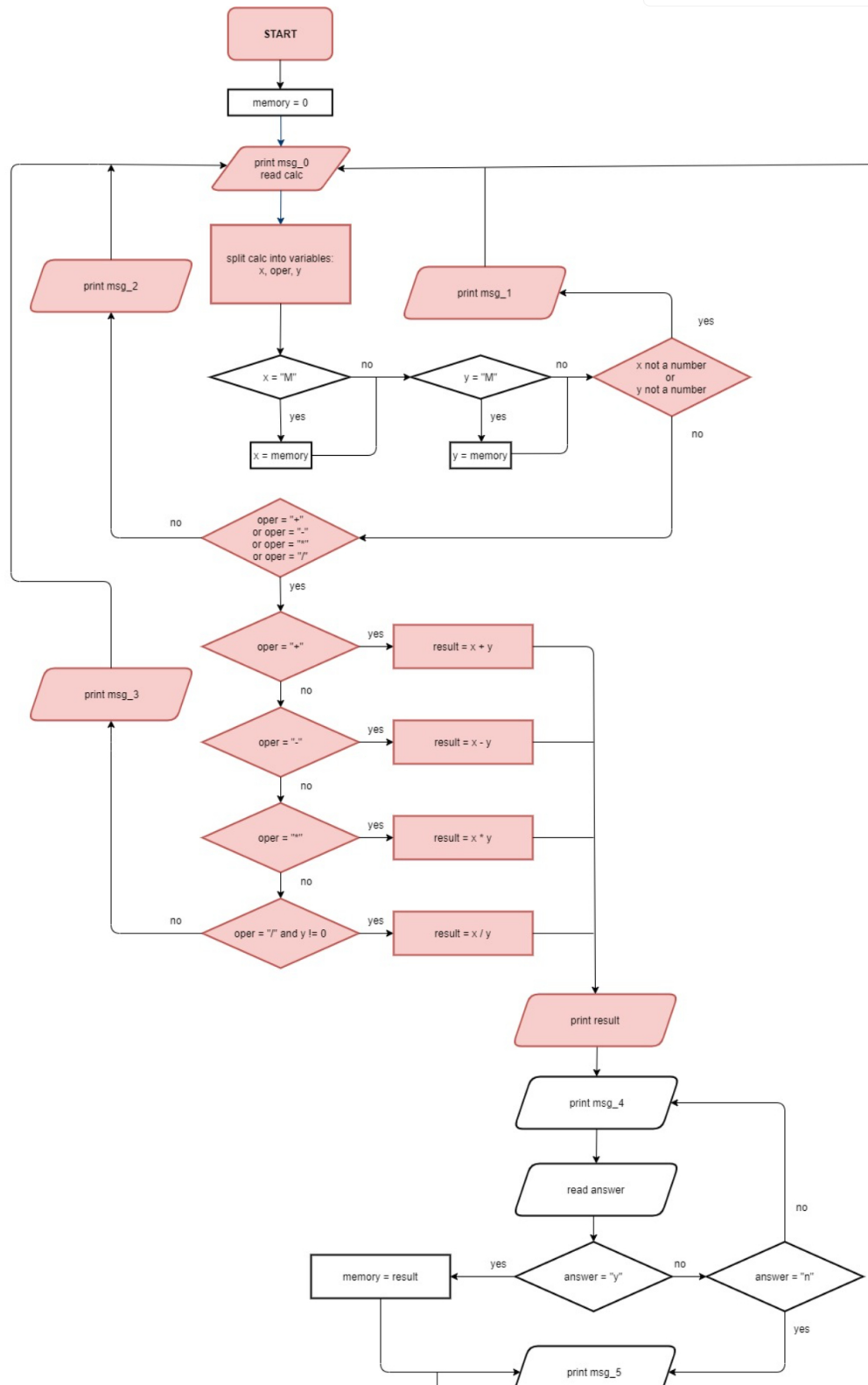
Medium 27 minutes 1602 users solved this stage. Latest completion was about 6 hours ago.

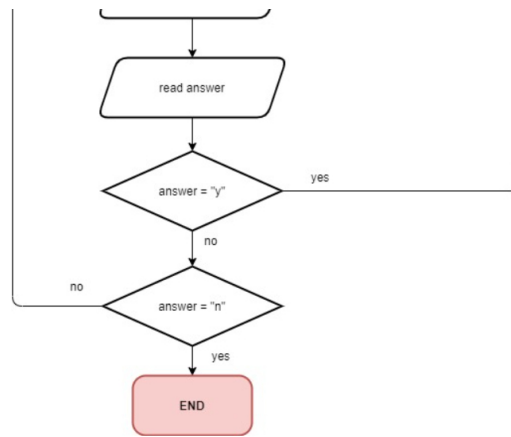
### §1. Description

Take a look at the upgraded flowchart. As before, the old blocks are red-colored. Be careful; some flows can now work differently.

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Discuss your current project with fellow learners and help each other.





## §2. Objectives

To complete this stage, you need to implement the flowchart above. While doing it, please, follow our recommendations below:

- Don't use the built-in functions to calculate from a string;
- The `memory` variable must be of a float type; use this variable to store intermediate result;
- There are no tests when `M` is negative. For example, there will be no test input like this: `-M + 6` ;
- Copy two messages. The tests will check if the correct message appears in the correct order. Don't add extra lines or characters.

```

msg_4 = "Do you want to store the result? (y / n):"
msg_5 = "Do you want to continue calculations? (y / n):"

```

## §3. Example

The greater-than symbol followed by a space ( `>`  ) represents the user input. Note that it's not part of the input.

Example 1:

```

Enter an equation
> 3 + 3
6
Do you want to store the result? (y / n):
>y
Do you want to continue calculations? (y / n):
>y
Enter an equation
> 5 + M
11
Do you want to store the result? (y / n):
>y
Do you want to continue calculations? (y / n):
>n

```

[Report a typo](#)

[⚡ See hint](#)

[↩ Write a program](#)

[Code Editor](#)

IDE ♥ + 100

```

1  '''# write your code here
2
3
4
5  def dosomething(x,y,oper):
6      try:
7          x=float(x)
8          y=float(y)
9      except ValueError:
10         print(msg_1)
11         return False
12     if oper not in ['+', '-', '*', '/']:
13         print(msg_2)
14         return False
15     else: return True
16
17  while True:
18
19     print(msg_0)
20     calc=input().split(" ")
21     # print(calc,type(calc))
22     x,oper,y=calc[0],calc[1],calc[2]
23     if dosomething(x,y,oper):
24         break
25

```

```

26
27 '''
28 msg_0 = "Enter an equation"
29
30 msg_1 = "Do you even know what numbers are? Stay focused!"
31
32 msg_2 = "Yes ... an interesting math operation. You've slept through all classes, haven't you?"
33 msg_3 = 'Yeah... division by zero. Smart move...'
34
35 msg_4 = "Do you want to store the result? (y / n):"
36
37 msg_5 = "Do you want to continue calculations? (y / n):"
38
39
40
41 memory=0
42 def mg5():
43     print(msg_5)
44     answer=input()
45     if answer=='y':
46         mainfunction(True)
47     elif answer=='n':
48         mainfunction(False)
49
50
51 def mg4(result):
52     global memory
53     print(msg_4)
54     answer=input()
55     if answer=='y':
56         memory=result
57         mg5()
58     elif answer!='y':
59         if answer=='n':
60             mg5()
61         else:
62             mg4(result)
63
64 def mainfunction(flag):
65     global memory
66     while flag:
67         result=0
68         print(msg_0)
69         calc=input().split(" ")
70         # print(calc,type(calc))
71         x,oper,y=calc[0],calc[1],calc[2]
72
73         if x=="M":
74             x=memory
75         elif y=="M":
76             y=memory
77
78         try:
79             x=float(x)
80             y=float(y)
81         except ValueError:
82             print(msg_1)
83
84         if oper not in ['+', '-', '*', '/']:
85             print(msg_2)
86         else:
87
88             if oper=='+':
89                 result=x+y
90                 print(x+y)
91             elif oper=='-':
92                 result=(x-y)
93                 print(x-y)
94             elif oper=='*':
95                 result=(x*y)
96                 print(x*y)
97             else:
98                 try:
99                     result=x/y
100                     print(x/y)
101                 except ZeroDivisionError:
102                     print(msg_3)
103                     break
104
105             mg4(result)
106         else:
107             if flag==False:
108                 exit()
109
110
111 mainfunction(True)

```

✓ Correct.

Amazing, you've got it!