Work on project. Stage 3/5: Total recall

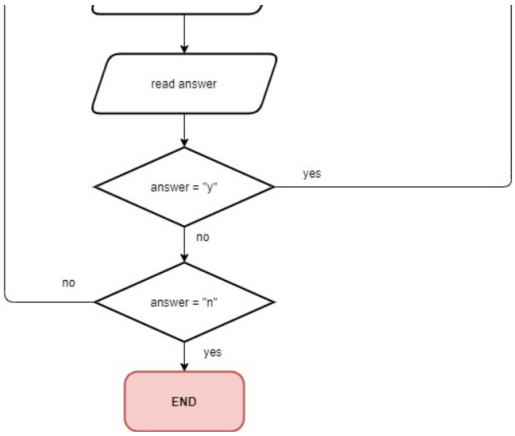
Project: Honest Calculator

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.



§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
```


See hint

Write a program

Code Editor IDE + 100

```
'''# write your code here



def dosomething(x,y,oper):
        try:
            x=float(x)
            y=float(y)
        except ValueError:
            print(msg_1)
            return False
        if oper not in ['+','-','*','/']:
            print(msg_2)
            return False
        else: return True

while True:

        print(msg_0)
        calc=input().split(" ")
        # print(calc,type(calc))
        x,oper,y=calc[0],calc[1],calc[2]
        if dosomething(x,y,oper):
            break

```

```
'''
msg_0 = "Enter an equation"

msg_1 = "Do you even know what numbers are? Stay focused!"

msg_2 = "Yes ... an interesting math operation. You've slept through all classes, haven't you?"
msg_3='Yeah... division by zero. Smart move...'

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

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



memory=0
def mg5():
  print(msg_5)
  answer=input()
  if answer=='y':
   mainfunction(True)
  elif answer=='n':
    mainfunction(False)


def mg4(result):
  global memory
  print(msg_4)
  answer=input()
  if answer=='y':
    memory=result
    mg5()
  elif answer!='y':
    if answer=='n':
      mg5()
    else:
      mg4(result)

def mainfunction(flag):
    global memory
    while flag:
            result=0
            print(msg_0)
            calc=input().split(" ")
            # print(calc,type(calc))
            x,oper,y=calc[0],calc[1],calc[2]

            if x=="M":
                x=memory
            elif y=="M":
                y=memory

            try:
              x=float(x)
              y=float(y)
            except ValueError:
              print(msg_1)

            if oper not in ['+','-','*','/']:
              print(msg_2)
            else:

              if oper=='+':
                result=x+y
                print(x+y)
              elif oper=='-':
                result=(x-y)
                print(x-y)
              elif oper=='*':
                  result=(x*y)
                  print(x*y)
              else:
                  try:
                      result=x/y
                      print(x/y)
                  except ZeroDivisionError:
                    print(msg_3)
                    break

            mg4(result)
    else:
      if flag==False:
        exit()


mainfunction(True)
```

✓ Correct.

Amazing, you've got it!