Work on project. Stage 5/5: Saving memory

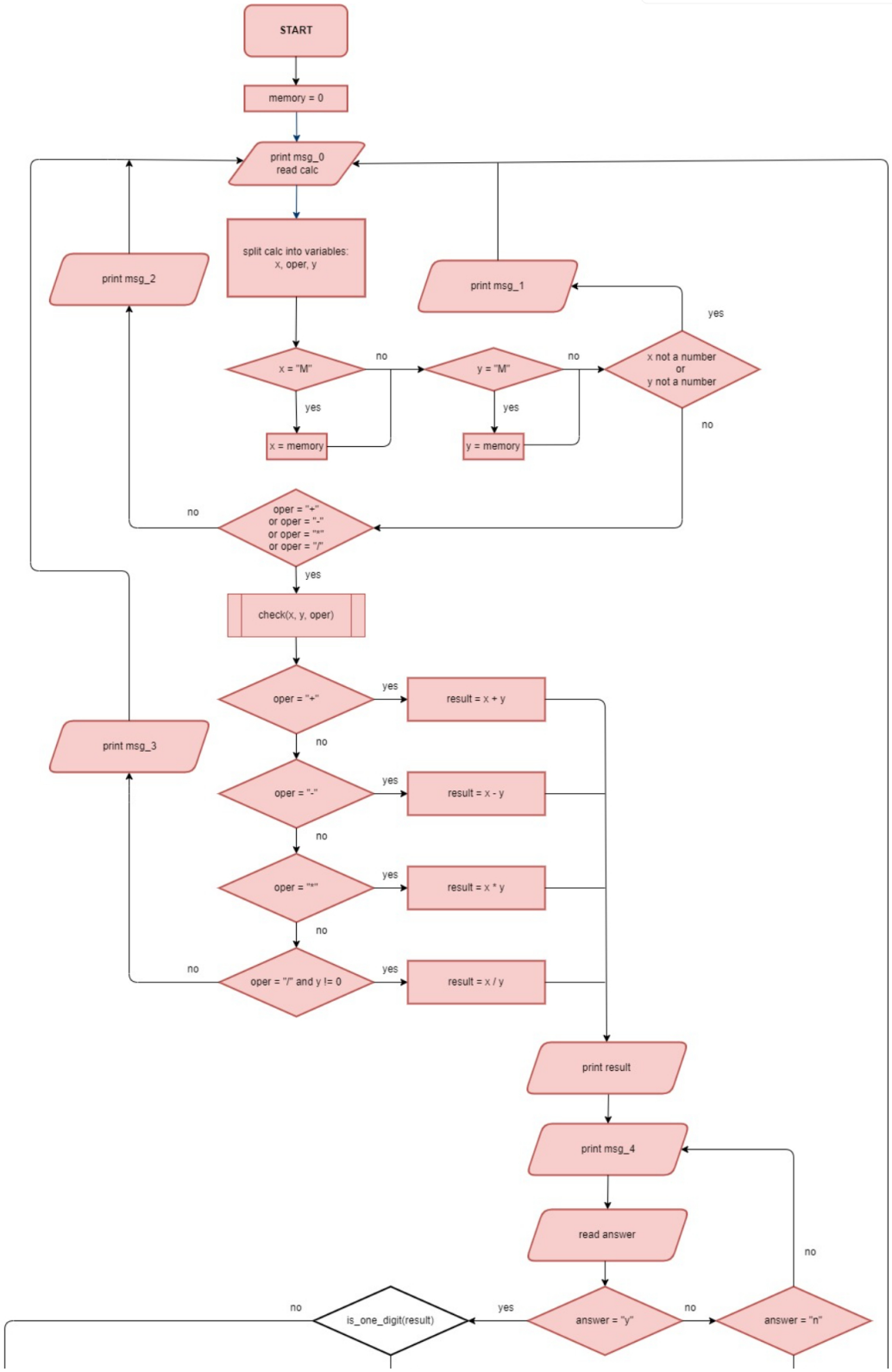
Project: Honest Calculator

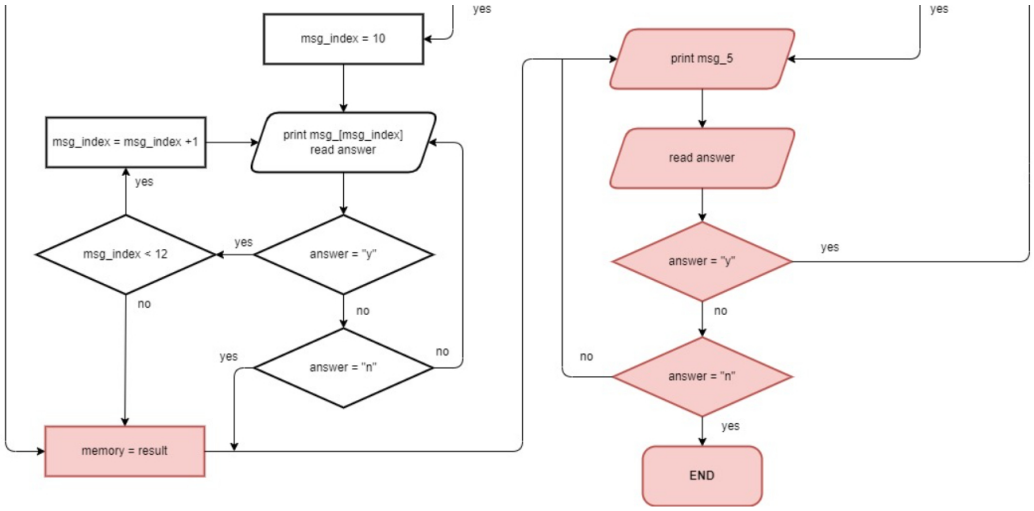
Saving memory

Medium 27 minutes **1481** users solved this stage. Latest completion was **38 minutes ago**.

§1. Description

To complete the project, you need to implement the flowchart below. The old blocks are red-colored. Be careful; some flows can work differently. The functions from the previous stage have not been changed.





§2. Objectives

Implement the flowchart. Please, follow the recommendations below:

- Don't use the built-in functions to calculate from a string;
- Copy the messages below. The tests will check if the correct message appears in the correct order. Don't add extra lines or characters.

```
msg_10 = "Are you sure? It is only one digit! (y / n)"

msg_11 = "Don't be silly! It's just one number! Add to the memory? (y / n)"

msg_12 = "Last chance! Do you really want to embarrass yourself? (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
2 + 3
You are ... lazy
5.0
Do you want to store the result? (y / n):
y
Are you sure? It is only one digit! (y / n)
y
Don't be silly, it's just one number! Add to the memory? (y / n)
n
Do you want to continue calculations? (y / n):
y
Enter an equation
5 + M
You are ... lazy ... very, very lazy
5.0
Do you want to store the result? (y / n):
y
Are you sure? It is only one digit! (y / n)
y
Don't be silly, it's just one number! Add to memory? (y / n)
y
Last chance! Do you really want to embarrass yourself? (y / n)
y
Do you want to continue calculations? (y / n):
y
Enter an equation
M / M
You are ... lazy
1.0
Do you want to store the result? (y / n):
n
Do you want to continue calculations? (y / n):
n
```


HINT by Oleg Vorontcov

If you doing this stage through the function it can cause a problems with calculations(I don't know why, but I had this). Try just put if statement to cycle...
Also maybe you have difficulties with test #3 "M / M". JBA didn't check this calculation in previous stages, error appears because if x == 'M', then you should also check if y == 'M' and only then check with elif y == 'M'
Also flowcharts ridiculous: I spent like an half an hour to understand what they want from me!)
If you have the same issue: Just keep asking questions till you have answer "yes" and then store memory, but if you have answer "no" for any of the answers => don't store result to memory)
Glad if I could help, good luck, have fun!):

Glad if I could help, good luck, have fun!!!:)

See the next hint

Write a program

Code Editor IDE + 100

```
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):"

msg_6 = " ... lazy"

msg_7 = " ... very lazy"

msg_8 = " ... very, very lazy"

msg_9 = "You are"

msg_10 = "Are you sure? It is only one digit! (y / n)"

msg_11 = "Don't be silly! It's just one number! Add to the memory? (y / n)"

msg_12 = "Last chance! Do you really want to embarrass yourself? (y / n)"


memory=0


message=["Are you sure? It is only one digit! (y / n)"

, "Don't be silly! It's just one number! Add to the memory? (y / n)"

,"Last chance! Do you really want to embarrass yourself? (y / n)"
]


def demo(result):

  if is_one_digit(result):
    mgs_index=0 #0
    print(message[mgs_index])
    answer=input()
    while mgs_index<2 and answer=='y':
      mgs_index+=1
      print(message[mgs_index])
      answer=input()
    else:
      if answer=='n':
        return False
  else:
    return True #no









memory=0
def is_one_digit(v):
  if (v>-10) and (v<10) and v==int(v):
    output=True
  else:
    output=False
  return output


def check(v1,v2,v3):
  msg=""
  while True:
      if is_one_digit(v1) and is_one_digit(v2):
          msg+=msg_6
      if (v1==1 or v2==1) and v3=="*":
            msg+=msg_7 #"" ... very lazy""
      if (v1==v2) and v3=="/":
```

```
            msg+=" ... lazy" #"" ... lazy""

        if (v1==0 or v2== 0) and (v3=="*" or v3=='+' or v3=='-'):
            msg+=msg_8 #  " ... very, very lazy"

        if msg !="":
            msg=msg_9+msg # "You are"
            print(msg)
        break
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':

    #need to replace this
    # result=memory_save(result)
    if demo(result):
      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
            if 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=='+':
                check(x,y,oper)
                result=x+y
                print(x+y)
              elif oper=='-':
                check(x,y,oper)
                result=(x-y)
                print(x-y)
              elif oper=='*':
                  check(x,y,oper)
                  result=(x*y)
                  print(x*y)
              else:
                  try:
                    # if str(x)=='M' and str(y)=='M':
                    #     x=1
                    #     y=1
                    #     result=x/y
                    #     print(x/y)
                    if x==y:
                        check(x,y,oper)
                    result=x/y
                    print(x/y)
                  except ZeroDivisionError:
                    print(msg_3)
                    mainfunction(True)
                    break

            mg4(result)
    else:
```

```
        if flag==False:
            exit()


mainfunction(True)
```

✓ Correct.

Practice makes perfect. Good for you for not giving up easily!

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