Amogh Karliadkar
IBMI8CS014

1) Predicates are different

⟶ we cannot unify if predicates are different

2) Mismatch in number of arguments

⟶ we cannot unify if number of arguments are different.

3) Arguments are constants

⟶ If both are constants we cannot unify.
Rut if some are constants unification is possible in some
cases.

~~unify (s_1, s_2):~~

~~if s_1 === s_2:~~

~~return false~~

~~elif variable (s_1):~~

~~if s_1 in s_2:~~

```
unify():
    flag = 0
    for i in range(count - 1)
        for j in range(argumentc[i]):
            if (args[i][j] != args[i+1][j]):
                flag = 0
                if(flag === 0):

                    substitution(args[i+1][j], args[i][j])
                    flag += 1

            if flag == 0:
                print("Arguments are identical")
                flag += 1
```

```
check():
    flag1 = 0
    flag2 = 0

    for i in range(count-1)
        if(preds[i] != preds[i+1]):
            print("Not same,")
            flag1=1
            break

    if(flag1 != 1):
        ind = 0
        key = argument[ind]
        length = len(argument)
        for i in range(0, key-1):
            if i >= key:
                continue
            if ind != length-1:
                ind += 1
                key = argument[ind]
            if argument[i] != argument[i+1]:
                print(" Number of arguments not same")
                flag2 = 1
                break.

            if flag2 = 0 and flag1 != 1:
                unify()
```

Amogh Karhadkar
1BM18CS014

```
count = 0
argument = [None for i in range(10)]
preds = [None for i in range(10)]
args = [[None for i in range(10)] for i in in range(10)]

main():

    global count

    char = 'y'

    while char == 'y':

        count = int(input("Enter number of predicates"))
        for i in range(count):
            print("Enter predicate ", (i+1), " : ")
            preds[i] = input()
            print("Enter no. of arguments")
            argument[i] = int(input())

            for j in range(argument[i]):
                print("enter argument")
                args[i][j] = input()
        printAns()
        predCheck()

printAns():

    print("The given predicates are")
    for i in range(count):
        print(preds[i])
        for j in range(argument[i]):
            print(args[i][j])
            if(j != argument[i] - 1):
                print(",", end="")
```