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# input and out file read and write
fd1 = open("proteinSeq", "r")
fd2 = open("mutationAAC", "r")
fd3 = open("mutateseq.fsa", "w+")

#line defining and counting from the inputfile fd2
Lines = fd2.readlines()

# read mutation one by one
for line in Lines:

    #print ("Lines{}:{}".format (count, line.strip()))

    #print (line.strip())

    mut = line.strip()

    pos = ""

    for i in mut:

        if i.isdigit():

            pos = pos + i

    exist_aa = mut[0]
    mutate_aa = mut[len(mut)-1]

    #print (exist_aa, mutate_aa)

    pos = int(pos)

    pos = pos-1

    #print (pos)

#finding seq position from the fd1 and defining from the mutated position required numbe writting the
17 mer fasta file as wt and mt to mutateseq.fsa

fd1.seek(pos, 0)

if (fd1.read(1) == exist_aa):

    fd1.seek(pos-8, 0)

    str = fd1.read(17)

    fd3.write(">WT")

    fd3.write(mut)

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fd3.write("\n")
fd3.write(str)
fd3.write("\n")
str = list(str)
str[9] = mutate_aa
str = ".join(str)
fd3.write(">MT")
fd3.write(mut)
fd3.write("\n")
fd3.write(str)
fd3.write("\n")
```