# This Python program reads the file of all generator polynomials and then create a search file for each of them

import shutil

import subprocess

lenStart=1

lenLimit=125

# clear the input and output directories

subprocess.Popen(["rm", "-r", "Input\_nf"]).communicate()

subprocess.Popen(["rm", "-r", "Output\_nf"]).communicate()

subprocess.Popen(["mkdir", "Input\_nf"]).communicate()

subprocess.Popen(["mkdir", "Output\_nf"]).communicate()

for length in range(lenStart,lenLimit+2,2):

original = "template\_nf.txt"

target = "len" + str(length) + "Generator.txt"

shutil.copyfile(original,"/home/onta1/non\_free\_Z4\_2/Input\_nf/"+target) # this command copies the template and create a copy of it having a different name

targetFile\_path = "/home/onta1/non\_free\_Z4\_2/Input\_nf/" + target

with open(targetFile\_path, "r") as f:

contents = f.readlines()

contents.insert(70, "n:=" + str(length) + ";") # this command insert a line right after line 22 of the template

with open(targetFile\_path, "w") as f:

contents = "".join(contents)

f.write(contents)