**Jash.py**

import wave

import argparse

def hide\_text\_in\_audio(audiofile, secretmsg, outputfile):

print("Please wait...")

waveaudio = wave.open(audiofile, mode='rb')

frame\_bytes = bytearray(list(waveaudio.readframes(waveaudio.getnframes())))

secretmsg = secretmsg + int((len(frame\_bytes) - (len(secretmsg) \* 8 \* 8)) / 8) \* '#'

bits = list(map(int, ''.join([bin(ord(i)).lstrip('0b').rjust(8, '0') for i in secretmsg])))

for i, bit in enumerate(bits):

frame\_bytes[i] = (frame\_bytes[i] & 254) | bit

frame\_modified = bytes(frame\_bytes)

with wave.open(outputfile, 'wb') as fd:

fd.setparams(waveaudio.getparams())

fd.writeframes(frame\_modified)

waveaudio.close()

print("Done...")

def main():

parser = argparse.ArgumentParser(description='Hide Your Secret Message in Audio Wave File')

parser.add\_argument('-f', '--audiofile', help='Select Audio File', required=True)

parser.add\_argument('-m', '--secretmsg', help='Enter your Secret Message', required=True)

parser.add\_argument('-o', '--outputfile', help='Your Output file path and name', required=True)

args = parser.parse\_args()

hide\_text\_in\_audio(args.audiofile, args.secretmsg, args.outputfile)

if \_name\_ == "\_main\_":

main()

**decodeaudio.py**

import wave

import argparse

def extract\_secret\_message(audiofile):

print("Please wait...")

waveaudio = wave.open(audiofile, mode='rb')

frame\_bytes = bytearray(list(waveaudio.readframes(waveaudio.getnframes())))

extracted = [frame\_bytes[i] & 1 for i in range(len(frame\_bytes))]

string = "".join(chr(int("".join(map(str, extracted[i:i+8])), 2)) for i in range(0, len(extracted), 8))

msg = string.split("###")[0]

print("Your Secret Message is:", msg)

waveaudio.close()

def main():

parser = argparse.ArgumentParser(description='Extract Your Secret Message from Audio Wave File')

parser.add\_argument('-f', '--audiofile', help='Select Audio File', required=True)

args = parser.parse\_args()

extract\_secret\_message(args.audiofile)

if \_name\_ == "\_main\_":

main()