

Task – 1

```
#read input file
inp = open("TextFiles\\input.txt", "r", encoding="UTF8")
#write output file
out = open("TextFiles\\output.txt", "w", encoding="UTF8")

wordcount = {}

#convert text into lowercase and replace new line character ('\n') with space (' ')
text = inp.read().lower().replace('\n', ' ')

#replace non alpha numeric characters with no space charcter ('')
for ch in '!"#$%&()*+,-./:;<=>?@[\\]^_`{|}~':
    text = text.replace(ch, '')

#split text file into words by space (' ')
words = text.split(' ')

#loop to count frequency of words
for word in words:
    if word not in wordcount:
        wordcount[word] = 1
    else:
        wordcount[word] += 1

#print frequency of words and write output to text file
for k, v in wordcount.items():
    print(k, ': ', v)
    print(k, ': ', v, file=out)

#close files
inp.close()
out.close()
```

Task – 2

```
import string
#create set with lowercased string
alphabets = set(string.ascii_lowercase)
#input strings
inp = ['How quickly daft jumping zebras vex', 'How quickly daft jumping zebras']

inp_nospace = [None]*inp.__len__()

for i in range(len(inp)):

    #replace space character (' ') with ('')
    inp_nospace[i] = inp[i].replace(' ', '')

    #check if every letter in the set alphabets is in the set created from input text
    output = ("is not a pangram", "is a pangram")[set(inp_nospace[i].lower()) >= alphabets]

    print(inp[i]+' --> '+output)
```

Task – 3

```
#declare array
result = []

#loop to find numbers which are divisible by 5 and multiple of 2
```

```
for x in range(700, 1700):  
    if (x % 7 == 0) and (x % 5 == 0):  
        result.append(x)  
  
print(result)
```