```
#Q1-->wap to find the factorial of a number.
import math
n=int(input())
print(math.factorial(n))


#Q2uestion-->wap to find square root of a number.
import math
a=int(input())
b=math.sqrt(a)
print(b)


#Q3-->wap to read an entire text file.
f=open("sample.txt",'r')
print(f.read())
f.close()


#Q4-->wap to read first n lines  of a file.
f=open("sample.txt",'r')
n=int(input("entre the no. of lines"))
for i in range(n):
    content=f.readline()
    print(content)
f.close()



#Q5-->wap to append text to a file and display the text.
f=open('sample.txt','a')
a=input("entre the text")
f.write(a)
f.close()
f=open("sample.txt",'r')
print(f.read())
f.close()


#Q6-->wap to read the last n lines of a file.
n=int(input("entre the no. of lines"))
with open("sample.txt")as f:
    print(list(f)[-n:])

#Q7-->wap to count the frequency of words in a file.
f=open("sample.txt",'r')
a=f.read().split()
b=set(a)
b=list(b)
for i in b:
    print(i,'=',a.count(i))
f.close()


#Q8-->wap to find the longest word in a file.
```

```
f=open('sample.txt','r')
a=f.read().split()
print(max(a,key=len))


#Q9-->wap in python to shuffle the elements of a given list.
import random
a=list(map(int,input().split()))
random.shuffle(a)
print(a)



#Q-10->wap to find the power of a given number using math module.
import math
n,p=list(map(int,input().split()))
print(math.pow(n,p))


#Q-11->wap to Generate 3 random integers between 100 and 999 which is divisible by 5.
import random

print("Generating 3 random integer number between 100 and 999 divisible by 5")
for num in range(3):
    print(random.randrange(100, 999, 5), end=', ')


#Q12-->wap to catch ZeroDivisionError Exception in python
import sys
try:
x=44/0
print x
except Exception as e:
print sys.exc_type
print e

#Q-13->wap to catch NameError Exception in python.
import sys
try:
def fun()
print ritesh
fun()
except NameError as e:
print sys.exc_type
print e

Q14--Write a program in python to replace all the ‘a’ by ‘@’ in a file “data.txt”
f = open("data.txt", "r")
d = f.read()
d = d.replace('a', '@')
f.close()
f=open("data.txt", "w")
f.write(d)
f.close()
```

#Q15--Write a program in python to read file “data.txt” and display only those lines whose length is more than 40 ch
aracters.

```
f=open("data.txt")
d=f.readlines()
for i in d:
   if len(i)>40:
      print(i)
```

#Q16--Write a program in python to remove all duplicate lines from the file “story.txt”.

```
f = open("story.txt", "r")
d = f.readlines()
m = [ ]
for i in d:
    if i not in m:
      m.append(i)
print(m)
f.close()
f = open("story.txt", "w")
for i in m:
    f.write(i)
f.close()
```

#Q17--Write a program in python to display only unique words from the file “story.txt”.

```
f = open("story.txt", "r")
d = f.read()
d = d.split()
str = " "
m = []
for i in d:
  if i not in str:
      str=str+i
      print(i, end=" ")
f.close()
```

#Q18--Write a program in python to count the frequency of each vowels in a file “task.txt”.

```
f = open("task.txt", "r")
d = f.read()
va=ve=vo=vu=vi=0
for i in d:
    if i=='a' or i=='A':
        va=va+1
    if i=='e' or i=='E':
        ve=ve+1
    if i=='i' or i=='I':
        vi=vi+1
    if i=='o' or i=='O':
        vo=vo+1
    if i=='u' or i=='U':
        vu=vu+1
print("Frequency of vowel \"a\" is", va)
print("Frequency of vowel \"e\" is", ve)
print("Frequency of vowel \"i\" is", vi)
print("Frequency of vowel \"o\" is", vo)
print("Frequency of vowel \"u\" is", vu)
```

#Q19--Write a program in python to count those lines from the file “div.txt” which are starting from ‘T’ or ‘M’.

```
f=open("div.txt", "r")
d=f.readlines()
c=0
for i in d:
    if i[0] == 'M' or i[0] == 'T':
       c=c+1
print("Total lines are :", c)
```

#Q-20-Write a program in python to count those lines from the file “div.txt” which are not starting from ‘M’.

```
f=open("div.txt")
d=f.readlines()
c=0
for i in d:
    if i[0] != 'M':
        c=c+1
print("Total lines are :", c)
```