NAME: NIRAJ THANKI

STUDENT ID: 19376

CLASS : CS531

8. getopt.getopt method • •
   - Please use getopt.getopt method to implement a Python script that finds the summation of

```
1 + 2 + 3 + 4 + ... + n
```

```
$ sum.py -n 1
1

$ sum.py -n 3
6

$ sum.py -n 4
10
```

   - References
     - Python Code Template for main()
     - String operation
9. Loop
   - Please use loop to implement a Python script that finds the summation of a sequence of numbers.

```
$ sum.py 1
1

$ sum.py 1 2 3
6

$ sum.py 1 2 3 8 7
21
```

   - References
     Python Code Template for main()
     - String operation
10. Object-Oriented Python • •

Q-8

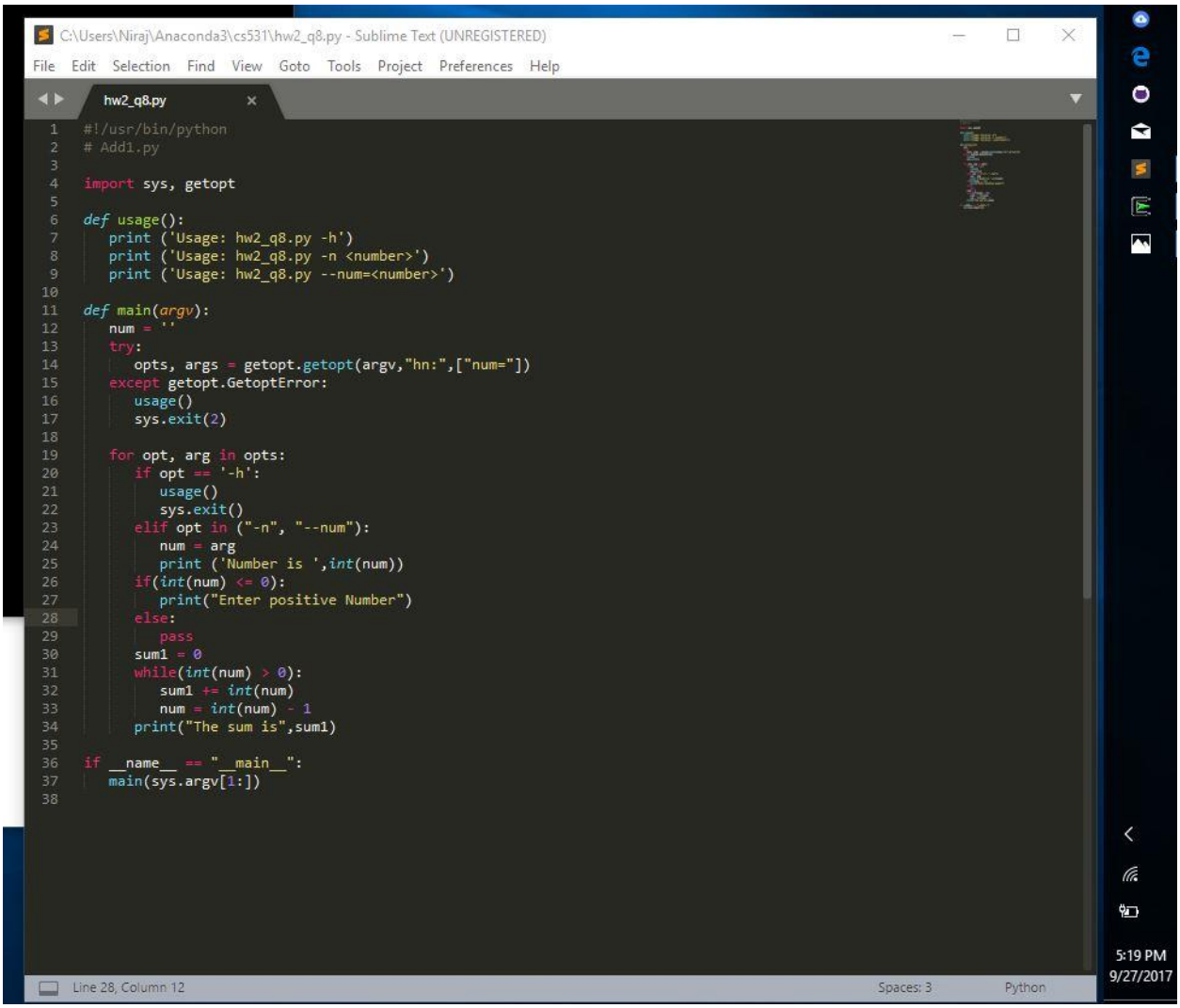
Source Code:

```
#!/usr/bin/python

# Add1.py


import sys, getopt


def usage():

  print ('Usage: hw2_q8.py -h')
```

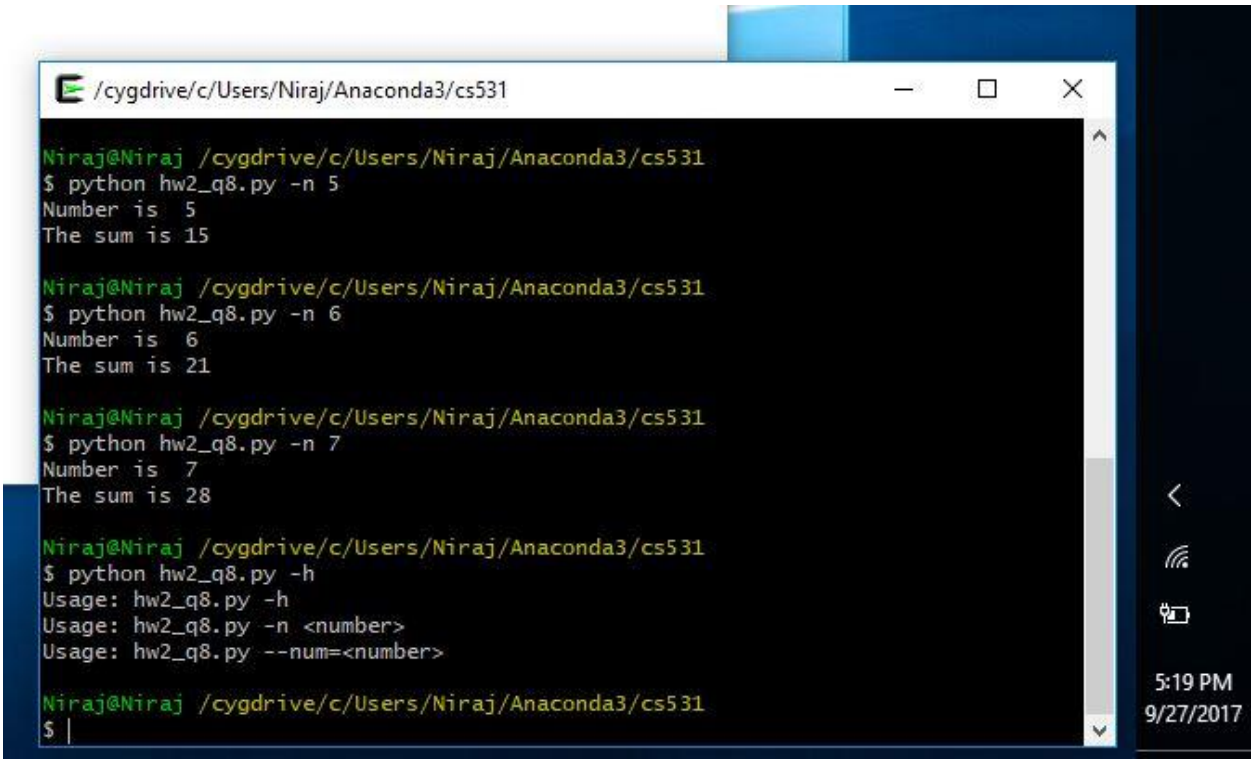
```
  print ('Usage: hw2_q8.py -n <number>')
  print ('Usage: hw2_q8.py --num=<number>')

def main(argv):
  num = ''
  try:
    opts, args = getopt.getopt(argv,"hn:",["num="])
  except getopt.GetoptError:
    usage()
    sys.exit(2)

  for opt, arg in opts:
    if opt == '-h':
      usage()
      sys.exit()
    elif opt in ("-n", "--num"):
      num = arg
      print ('Number is ',int(num))
    if(int(num) <= 0):
      print("Enter positive Number")
    else:
      pass
    sum1 = 0
    while(int(num) > 0):
      sum1 += int(num)
```

```
        num = int(num) - 1
    print("The sum is",sum1)

if __name__ == "__main__":
   main(sys.argv[1:])
```

ScreenShot :



OutPut:



Q-9

Source Code:

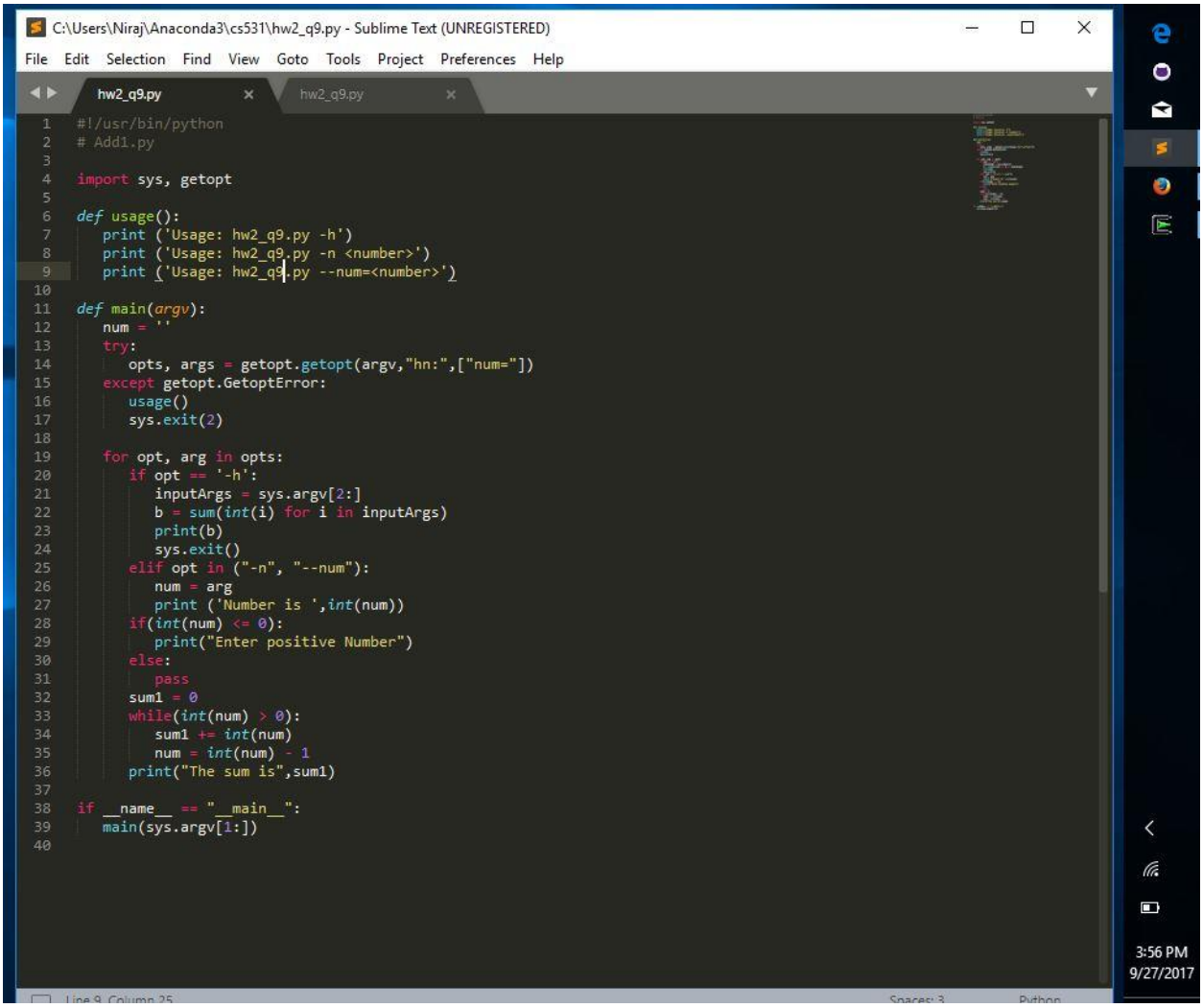
```
#!/usr/bin/python

# Add1.py


import sys, getopt


def usage():

  print ('Usage: hw2_q9.py -h')

  print ('Usage: hw2_q9.py -n <number>')

  print ('Usage: hw2_q9.py --num=<number>')


def main(argv):
```

```
num = ''
try:
  opts, args = getopt.getopt(argv,"hn:",["num="])
except getopt.GetoptError:
  usage()
  sys.exit(2)

for opt, arg in opts:
  if opt == '-h':
    inputArgs = sys.argv[2:]
    b = sum(int(i) for i in inputArgs)
    print(b)
    sys.exit()
  elif opt in ("-n", "--num"):
    num = arg
    print ('Number is ',int(num))
  if(int(num) <= 0):
    print("Enter positive Number")
  else:
    pass
  sum1 = 0
  while(int(num) > 0):
    sum1 += int(num)
    num = int(num) - 1
  print("The sum is",sum1)
```

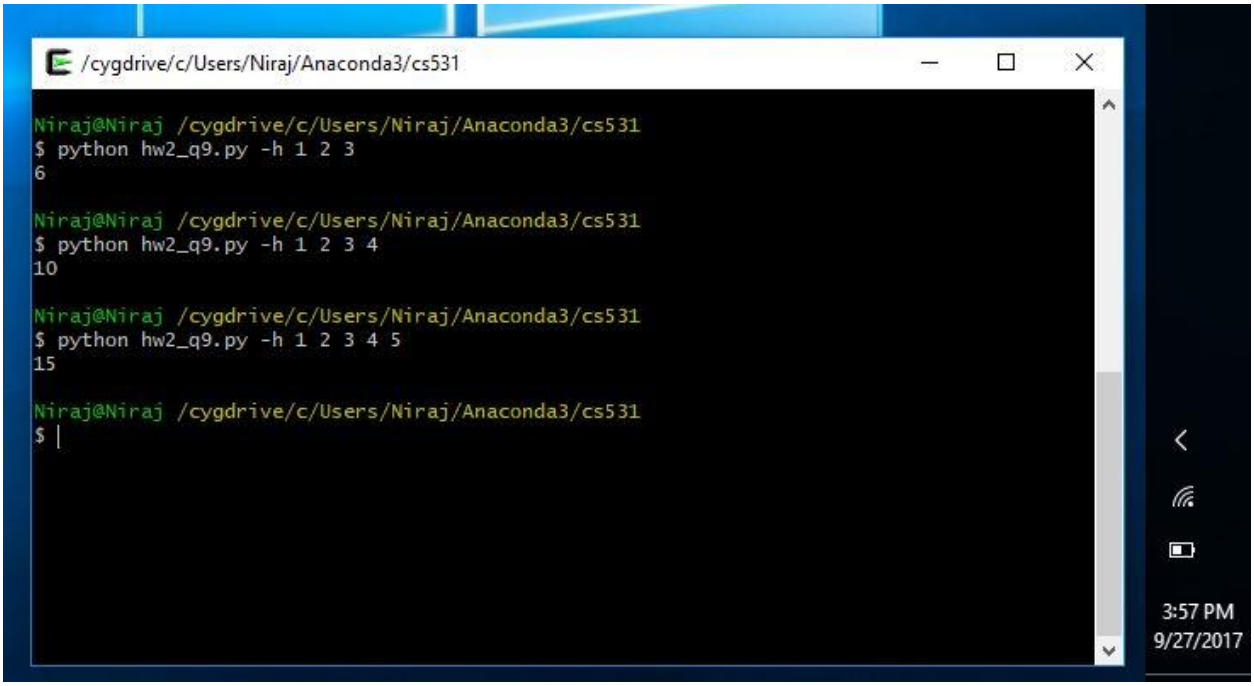
if __name__ == "__main__":

  main(sys.argv[1:])

ScreenShot:



OutPut:


/cygdrive/c/Users/Niraj/Anaconda3/cs531
Niraj@Niraj /cygdrive/c/Users/Niraj/Anaconda3/cs531
$ python hw2_q9.py -h 1 2 3
6
Niraj@Niraj /cygdrive/c/Users/Niraj/Anaconda3/cs531
$ python hw2_q9.py -h 1 2 3 4
10
Niraj@Niraj /cygdrive/c/Users/Niraj/Anaconda3/cs531
$ python hw2_q9.py -h 1 2 3 4 5
15
Niraj@Niraj /cygdrive/c/Users/Niraj/Anaconda3/cs531
$
3:57 PM
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