Option 1

```
SI.
        Script
No.
1.
        first = 'Sue'
        last = 'Wong'
        name = first + ' ' + last
        name
          /ishg@OhWell MINGW32
           py random.py
         Sue Wong
2.
        x = 3
        y = 5
        print('The sum of', x, 'plus', y, 'is', x+y)
           ishg@OhWell MINGW32 ~/Doc
         $ py random.py
The sum of 3 plus 5 is 8
3.
        sillyTest = "Say,
        "I'm in!"
        This is line 3""
        print(sillyTest)
        sillyTest
          ishg@OhWell MINGW32
           py random.py
         Say,
"I'm in!"
          This is line 3
4.
        applicant = input("Enter the applicant's name: ") interviewer = input("Enter the interviewer's name: ")
        time = input("Enter the appointment time: ") print(interviewer, "will interview", applicant, "at", time)
            shg@OhWell MINGW32 ~/Documents/Vishal/SNU/Se
        $ py random.py
Enter the applicant's name: vishal
Enter the interviewer's name: kernighan
Enter the appointment time: 10:00am
kernighan will interview vishal at 10:00am
5.
        x = input("Enter an integer: ")
        y = input("Enter another integer: ")
        print('The sum of ', x, ' and ', y, ' is ', x+y, '.', sep=")
          ishg@OhWell MINGW32 ~/Document
           py random.py
         Enter an integer: 26
        Enter another integer: 24
The sum of 26 and 24 is 2624.
```

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6.
       xString = input("Enter an integer: ")
       x = int(xString)
       yString = input("Enter another integer: ")
       y = int(yString)
       print('The sum of ', x, ' and ', y, ' is ', x+y, '.', sep=")
        rishg@OhWell MINGW32 ~/Docum
         py random.py
       Enter an integer: 26
       Enter another integer: 24
The sum of 26 and 24 is 50.
7.
       person = input('Enter your name: ')
       greeting = 'Hello {}!'.format(person)
       print(greeting)
        ishg@OhWell MINGW32 ~/Do
         py random.py
       Entér your name: vishal
Hello vishal!
8.
       applicant = input("Enter the applicant's name: ") interviewer = input("Enter the interviewer's name: ")
       time = input("Enter the appointment time: ") print(interviewer + 'will interview ' + applicant + 'at ' +
       time +'.')
       print(interviewer, 'will interview', applicant, 'at', time, '.', sep=")
       print('{} will interview {} at {}.'.format(interviewer, applicant, time))
       print('****************')
       print('{0} will interview {1} at {2}.'.format(interviewer, applicant, time))
        ishg@OhWell MINGW32 ~/Documents/Vishal/SNU/Sem
         py random.py
       Enter the applicant's name: vishal
       Enter the interviewer's name: applebaum
       Enter the appointment time: 10:10am
       applebaum will interview vishal at 10:10am.
       applebaum will interview vishal at 10:10am.
       applebaum will interview vishal at 10:10am.
       applebaum will interview vishal at 10:10am.
9.
       a = 5
       formatStr = 'The set is {{{}}, {}}}.' setStr = formatStr.format(a, b)
       print(setStr)
         ishg@OhWell MINGW32
         py random.py
        The set is \{5, 9\}.
```

```
10.
          def happyBirthday(person):
              print("Happy Birthday to you!")
              print("Happy Birthday to you!")
              print("Happy Birthday, dear " + person + ".")
              print("Happy Birthday to you!") happyBirthday('Emily')
          happyBirthday('Andre')
              shg@OhWell MINGW32 ~/Docum
          $ py random.py
Happy Birthday to you!
Happy Birthday to you!
Happy Birthday, dear Emily.
Happy Birthday to you!
Happy Birthday, dear Andre.
Happy Birthday to you!
11.
          def lastFirst(firstName, lastName):
              separator = ', '
              result = lastName + separator + firstName
              return result
          print(lastFirst('Benjamin', 'Franklin')) print(lastFirst('Andrew', 'Harrington'))
             ishg@OhWell MINGW32
             py random.py
           Franklin, Benjamin
          Harrington, Andrew
12.
          PI = 3.14159265358979
          def circleArea(radius):
              return PI*radius*radius
          def circleCircumference(radius):
              return 2*PI*radius
          print('circle area with radius 5:', circleArea(5))
          print('circumference with radius 5:', circleCircumference(5))
              shg@OhWell MINGW32 ~/Documents/Vishal/SNU/Sem-V
          $ py random.py
circle area with radius 5: 78.53981633974475
circumference with radius 5: 31.4159265358979
```

```
13.
       def createDictionary():
         "'Returns a tiny Spanish dictionary"
         spanish = dict() # creates an empty dictionary
         spanish['hello'] = 'hola'
         spanish['yes'] = 'si'
         spanish['one'] = 'uno'
         spanish['two'] = 'dos'
         spanish['three'] = 'tres'
         spanish['red'] = 'rojo'
         spanish['black'] = 'negro'
         return spanish
       def main():
       dictionary = createDictionary()
       print(dictionary['two'])
       print(dictionary['red'])
       main()
         ishg@OhWell MINGW32
        py random.py
       dos
        rojo
14.
       numberFormat = "Count in Spanish: {one}, {two}, {three}" withSubstitutions =
       numberFormat.format(one='uno', two='dos', three='tres')
       print(withSubstitutions)
         ishg@OhWell MINGW32 ~/Documents/Visl
          py random.py
        Count in Spanish: uno, dos, tres
15.
       x = 20
       y = 30
       sum = x+y
       prod = x*y
       formatStr = \{x\} + \{y\} = \{sum\};
       \{x\} * \{y\} = \{prod\}.'
       equations = formatStr.format(**locals())
       print(equations)
          shg@OhWell MINGW32 ~/Documents
          py random.py
) + 30 = 50; 20 * 30 = 600.
16.
       person = input('Enter your name: ')
       greeting = 'Hello {person}!'.format(**locals())
       print(greeting)
          ishg@OhWell MINGW32 ~/Docu
          py random.py
        Enter your name: vishal
        Hello vishal!
```

```
17.
       for count in [1, 2, 3]:
         print(count)
         print('Yes' * count)
         ishg@OhWell MINGW32
          py random.py
        Yes
        YesYes
         'esYesYes
       n = int(input('Enter the number of times to repeat: '))
18.
       for i in range(n):
          print('This is repetitious!')
           shg@OhWell MINGW32 ~/Documents/Vishal/S
       $ py random.py
Enter the number of times to repeat: 3
This is repetitious!
This is repetitious!
        This is repetitious!
       items = ['red', 'orange', 'yellow', 'green']
19.
       number = 1
       for item in items:
          print(number, item)
         number = number + 1
           shg@OhWell MING
          py random.py
          red
          orange
          yellow
          green
20.
       def numberList(items):
         "Print each item in a list items, numbered in order."
         number = 1
         for item in items:
           print(number, item)
           number = number + 1
       def main():
         numberList(['red', 'orange', 'yellow', 'green'])
         numberList(['apples', 'pears', 'bananas'])
       main()
         ishg@OhWell M
          py random.py
           red
          orange
          yellow
           apples
           bananas
```

```
# Print out all the 8 bit binary numbers
# Do not use a decimal to binary conversion
def add1(arr):
       i=len(arr)-1
       if(arr[i] == 0):
               arr[i] = 1
               return arr
       else:
               while(arr[i] == 1 and i>=0):
                      arr[i] = 0
                      i = i-1
               arr[i] = 1
               return arr
if name == " main ":
       arr = [0,0,0,0,0,0,0,0]
       print(arr)
       for i in range(pow(2,len(arr))-1):
               print(add1(arr))
       print("Total numbers printed = " + str(i+1))
```

```
MINGW32:/c/Users/vishg/Documents/Vishal/SNU/Sem-VII/Data Engg/Lab 2
shg@OhWell MINGW32 ~/Documents/Vishal/SNU/Sem-VII/Data Engg/Lab 2
```