

```
'''
Assignment No.: 2
Course: PROG12974
Your Name: Michael Aaron Nolk
Your Sheridan Student Number: 991673010
Submission date: 11/20/2022
Instructor's name: Syed Tanbeer
'''
```

- 1 - Draw Shape
 - a) Triangle
 - b) Rectangle
- 2 - Fermat's Last Theorem
- 3 - Facto-Power Series
- 4 - Check Password
- 5 - Quit

```
Please select a Option: 1
Please Select from one of the following options
PLEASE TYPE '1' FOR
-- DRAWING A SQUARE
PLEASE TYPE '2' FOR
-- DRAWING A TRIANGLE
enter selection here >> 2
Enter the height of the triangle: 10
*
**
*  *
*   *
*    *
*     *
*      *
*       *
*        *
*         *
*          *
* * * * *
* * * * *

Would you like to Continue? Y/n n
Michael Aaron Nolk || Student Num: 991673010
```

- 1 - Draw Shape
 - a) Triangle
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```
Please select a Option: 1
Please Select from one of the following options
PLEASE TYPE '1' FOR
-- DRAWING A SQUARE
PLEASE TYPE '2' FOR
-- DRAWING A TRIANGLE
enter selection here >> 2
Enter the height of the triangle: 3
*
**
* *

Would you like to Continue? Y/n n
Michael Aaron Nolk || Student Num: 991673010
```

Screenshot 1

```
PS C:\Users\Mikey (1)\Python\2 drafts> & "C:/Users/Mikey (1)/AppData/Local/Microsoft/Windows/
```

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Please select a Option: 1

Please Select from one of the following options

PLEASE TYPE '1' FOR

-- DRAWING A SQUARE

PLEASE TYPE '2' FOR

-- DRAWING A TRIANGLE

enter selection here >> 1

Enter the width of the rectangle: 10

Enter the length of the rectangle: 5

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Would you like to Continue? Y/n n

Michael Aaron Nolk || Student Num: 991673010

- 1 - Draw Shape
 - a) Triangle
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- 2 - Fermat's Last Theorem
- 3 - Facto-Power Series
- 4 - Check Password
- 5 - Quit

Please select a Option: 1

Please Select from one of the following options

PLEASE TYPE '1' FOR

-- DRAWING A SQUARE

PLEASE TYPE '2' FOR

-- DRAWING A TRIANGLE

enter selection here >> 1

Enter the width of the rectangle: 5

Enter the length of the rectangle: 5

* * * * *

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* * * * *

Would you like to Continue? Y/n n

Michael Aaron Nolk || Student Num: 991673010

Screen Shot 2

```
1 - Draw Shape
    a) Triangle
    b) Rectangle
2 - Fermat's Last Theorem
3 - Facto-Power Series
4 - Check Password
5 - Quit

Please select a Option: 2
Welcome to Fermat theorem please enter the values below for  $a^n + b^n = c^n$ 
Please enter A: 10
Please enter B: 10
Please enter C: 10
Please enter N: 10
For n = 10, Left hand side != Right hand side: The theorem holds
10000000000 + 10000000000 = 10000000000
Would you like to Continue? Y/n n
Michael Aaron Nolk || Student Num: 991673010
```

```
Welcome to Fermat theorem please enter the values below for  $a^n + b^n = c^n$ 
Please enter A: 5
Please enter B: 12
Please enter C: 13
Please enter N: 2
For n = 2, Left hand side = Right hand side: The theorem holds
25 + 144 = 169
Would you like to Continue? Y/n n
Michael Aaron Nolk || Student Num: 991673010
```

Screen Shot 3

- 1 - Draw Shape
 - a) Triangle
 - b) Rectangle
- 2 - Fermat's Last Theorem
- 3 - Facto-Power Series
- 4 - Check Password
- 5 - Quit

```
Please select a Option: 3
Enter the value for n: 77
The sum of the series: 1.9894817583253107e+32
Would you like to Continue? Y/n y
Enter the value for n: 21
The sum of the series: 183614527.27585527
Would you like to Continue? Y/n n
Michael Aaron Nolk || Student Num: 991673010
```

Screenshot 4 (Both inputs are in the screen shot)

- 1 - Draw Shape
 - a) Triangle
 - b) Rectangle
- 2 - Fermat's Last Theorem
- 3 - Facto-Power Series
- 4 - Check Password
- 5 - Quit

Please select a Option: 4

Welcome to PASSWORDCHECKER

here are valid password rules

1. Password length must be at least 8 characters.

2. Password must contain combination of uppercase, lowercase, numbers, and symbols (except '<' and '>').

Enter a password: michaelAaron123

Thanks!

Would you like to Continue? Y/n y

Enter a password: PleaseGiveMeMarkOf100%

Thanks!

Would you like to Continue? Y/n y

Enter a password: invalidpassword><><><><>

Cannot contain '>' or '<' symbols

Password should contain digits

password should contain upper case characters

Would you like to Continue? Y/n n

Thanks For using the password checker

Michael Aaron Nolk || Student Num: 991673010

Screenshot 5(3 input in same screen shot)