Assignment 2

1. What should be the output of following:

$3 + 4 ** 6 - 9 * 10 / 2$

-> Priority of exponential is highest and then multiplication, division and then addition, subtraction. On calculating we get 4054

2. Find out the total vowel in given string
"Hello this side regex"

->

Code and Output:

```
str1 = 'hello this side regex'
vowel_count = 0
for i in str1:
    if (i == 'a' or i == 'e' or i == 'u' or i == 'o' or i == 'i'):
        vowel_count += 1
print(f'Total number of vowels in given string: {vowel_count}')

Total number of vowels in given string: 7
```

3. Find an area of the Triangle. Take height and base from the user.
->

Code and Output:

```
def area_of_triangle(b, h):
    return (1/2) * b * h


#DriverCode
print('Triangle Area Counter')
base = int(input('Enter the value of base: '))
height = int(input('Enter the value of height: '))
result = area_of_triangle(base, height)
print(f'Area of Triangle having Base {base} and Height {height} is: {result}')

Triangle Area Counter
Enter the value of base: 10
Enter the value of height: 8
Area of Triangle having Base 10 and Height 8 is: 40.0
```

4. Take the input from the user as a year and print the calendar of that year.

->

Code:

```python
import calendar
print('Calendar Printer')
year = int(input('Enter the year: '))
print(calendar.calendar(year))
```

Output:

```
Calendar Printer
Enter the year: 2020
                                  2020

         January                 February                   March
Mo Tu We Th Fr Sa Su     Mo Tu We Th Fr Sa Su     Mo Tu We Th Fr Sa Su
       1  2  3  4  5                     1  2                        1
 6  7  8  9 10 11 12      3  4  5  6  7  8  9      2  3  4  5  6  7  8
13 14 15 16 17 18 19     10 11 12 13 14 15 16      9 10 11 12 13 14 15
20 21 22 23 24 25 26     17 18 19 20 21 22 23     16 17 18 19 20 21 22
27 28 29 30 31           24 25 26 27 28 29        23 24 25 26 27 28 29
                                                  30 31

          April                    May                      June
Mo Tu We Th Fr Sa Su     Mo Tu We Th Fr Sa Su     Mo Tu We Th Fr Sa Su
       1  2  3  4  5                  1  2  3      1  2  3  4  5  6  7
 6  7  8  9 10 11 12      4  5  6  7  8  9 10      8  9 10 11 12 13 14
13 14 15 16 17 18 19     11 12 13 14 15 16 17     15 16 17 18 19 20 21
20 21 22 23 24 25 26     18 19 20 21 22 23 24     22 23 24 25 26 27 28
27 28 29 30              25 26 27 28 29 30 31     29 30

          July                   August                  September
Mo Tu We Th Fr Sa Su     Mo Tu We Th Fr Sa Su     Mo Tu We Th Fr Sa Su
       1  2  3  4  5                     1  2      1  2  3  4  5  6
 6  7  8  9 10 11 12      3  4  5  6  7  8  9      7  8  9 10 11 12 13
13 14 15 16 17 18 19     10 11 12 13 14 15 16     14 15 16 17 18 19 20
20 21 22 23 24 25 26     17 18 19 20 21 22 23     21 22 23 24 25 26 27
27 28 29 30 31           24 25 26 27 28 29 30     28 29 30
                         31

         October                 November                 December
Mo Tu We Th Fr Sa Su     Mo Tu We Th Fr Sa Su     Mo Tu We Th Fr Sa Su
          1  2  3  4                        1      1  2  3  4  5  6
 5  6  7  8  9 10 11      2  3  4  5  6  7  8      7  8  9 10 11 12 13
12 13 14 15 16 17 18      9 10 11 12 13 14 15     14 15 16 17 18 19 20
19 20 21 22 23 24 25     16 17 18 19 20 21 22     21 22 23 24 25 26 27
26 27 28 29 30 31        23 24 25 26 27 28 29     28 29 30 31
                         30
```