1. Python program to find difference between current time and given time
2. Python Program to Create a Lap Timer
3. Convert date string to timestamp in Python
4. How to convert timestamp string to datetime object in Python?
5. Find number of times every day occurs in a Year
6. Python Program to Check if String Contain Only Defined Characters using Regex
7. Python program to Count Uppercase, Lowercase, special character and numeric values using Regex
8. Python Program to find the most occurring number in a string using Regex
9. Python Regex to extract maximum numeric value from a string
10. Python Program to put spaces between words starting with capital letters using Regex

Here are Python programs for each of the tasks you've listed:

### 1. Python Program for Cycle Sort

```python

def cycleSort(arr):

writes = 0

for cycleStart in range(0, len(arr) - 1):

item = arr[cycleStart]

pos = cycleStart

for i in range(cycleStart + 1, len(arr)):

if arr[i] < item:

pos += 1

if pos == cycleStart:

continue

while item == arr[pos]:

pos += 1

arr[pos], item = item, arr[pos]

writes += 1

while pos != cycleStart:

pos = cycleStart

for i in range(cycleStart + 1, len(arr)):

if arr[i] < item:

pos += 1

while item == arr[pos]:

pos += 1

arr[pos], item = item, arr[pos]

writes += 1

return writes

arr = [1, 8, 3, 9, 10, 10, 2, 4]

n = len(arr)

cycleSort(arr)

print("Sorted array:", arr)

```

### 2. Python Program for Stooge Sort

```python

def stoogeSort(arr, l, h):

if l >= h:

return

if arr[l] > arr[h]:

arr[l], arr[h] = arr[h], arr[l]

if h-l+1 > 2:

t = (h-l+1) // 3

stoogeSort(arr, l, h-t)

stoogeSort(arr, l+t, h)

stoogeSort(arr, l, h-t)

arr = [2, 4, 5, 3, 1]

n = len(arr)

stoogeSort(arr, 0, n-1)

print("Sorted array:", arr)

```

### 3. Python Program to Print the Pattern ‘G’

```python

def printPatternG(n):

for row in range(n):

for col in range(n):

if (col == 0 or (col == n-1 and (row != 0 and row != n-1)) or

((row == 0 or row == n-1) and (col > 0 and col < n-1)) or

(row == n//2 and col > n//2)):

print("\*", end="")

else:

print(end=" ")

print()

printPatternG(7)

```

### 4. Python Program to Print an Inverted Star Pattern

```python

def invertedStarPattern(n):

for i in range(n, 0, -1):

print('\*' \* i)

n = 5

invertedStarPattern(n)

```

### 5. Python Program to Print Double-Sided Staircase Pattern

```python

def doubleSidedStairCase(n):

for i in range(1, n + 1):

print(" " \* (n - i) + "\*" \* i + "\*" \* i)

n = 5

doubleSidedStairCase(n)

```

### 6. Python Program to Print with Your Own Font

```python

from PIL import Image, ImageDraw, ImageFont

def printWithFont(text, font\_path="arial.ttf", font\_size=36):

image = Image.new('RGB', (600, 100), color = (255, 255, 255))

draw = ImageDraw.Draw(image)

font = ImageFont.truetype(font\_path, font\_size)

draw.text((10, 10), text, font=font, fill=(0, 0, 0))

image.show()

printWithFont("Hello, World!")

```

### 7. Get Current Date and Time Using Python

```python

from datetime import datetime

now = datetime.now()

print("Current Date and Time:", now.strftime("%Y-%m-%d %H:%M:%S"))

```

### 8. Python Program to Find Yesterday’s, Today’s, and Tomorrow’s Date

```python

from datetime import date, timedelta

today = date.today()

yesterday = today - timedelta(days=1)

tomorrow = today + timedelta(days=1)

print("Yesterday:", yesterday)

print("Today:", today)

print("Tomorrow:", tomorrow)

```

### 9. Python Program to Convert Time from 12 Hour to 24 Hour Format

```python

def convertTo24Hour(time):

in\_time = datetime.strptime(time, "%I:%M %p")

out\_time = datetime.strftime(in\_time, "%H:%M")

return out\_time

time = "02:30 PM"

print("24 Hour Format:", convertTo24Hour(time))

```

These programs cover a variety of tasks, from sorting algorithms to date and time manipulation, and pattern printing.