APSSDC

Andhra Pradesh State Skill Development Corporation

(https://apssdc.in)

Day05 Python Programming

String Methods Discussed in Last Class

- upper()
- lower()
- isupper()
- islower()
- isdigit()
- isalnum()
- isspace()
- split()
- strip()
- rstrip()
- lstrip()
- title()
- count()
- istitle()
- capitialize()
- casefold()
- swapcase()

Day05 Objectives

- String Methods contd.
- Conditional Statements
- Loops in Python

In [28]:
```
1 s1 = 'apssdc day05 python programming'
```

In [2]:
```
1 roll = '18X41A0037' # YearOfJoining + CollegeCode + UniversityCode + Bra
```

In [5]:
```
1 roll.split('X')[0] == '18'
```

Out[5]: True

In [6]:
```
roll.startswith('18')
```

Out[6]: True

In [7]:
```
'X4' in roll
```

Out[7]: True

In [8]:
```
cl = 'A1'
rollNo = '18A11A1232'
```

In [9]:
```
roll[2:]
```

Out[9]: 'X41A0037'

In [10]:
```
roll[2:].startswith('X4')
```

Out[10]: True

In [12]:
```
roll[4:].startswith('1A')
```

Out[12]: True

In [1]:
```
email1 = 'support@apssdc.in'
email = 'apssdc.india@apssdc.in'
email4 = 'apssdc.india@gmail.com' # --> employee
email2 = 'apssdc@gmail.com'
email3 = 'apssdc@gotomeeting.in'
```

In [2]:
```
'apssdc.in' in email4
```

Out[2]: True

In [3]:
```
email1.endswith('apssdc.in')
```

Out[3]: True

In [5]:
```
email1.split('@')
```

Out[5]: ['support', 'apssdc.in']

In [7]:
```
email1.split('@')[-1] == 'apssdc.in'
```

Out[7]: True

In [8]:
```
roll = '18X41A1299' # 12 - IT,
roll1 = '18X41A0237' # 02 - EEE, 01 - Civil, 05 - CSE, 04 - ECE, 03 - Me
```

In [9]:
```
1 roll.endswith('1299')
```

Out[9]: True

In [10]:
```
1 roll[6:].startswith('12')
```

Out[10]: True

In [11]:
```
1 roll[:-2]
```

Out[11]: '18X41A12'

In [12]:
```
1 roll[:-2].endswith('12')
```

Out[12]: True

Format

In [17]:
```
1 'APSSDC Day{} Python Programming'.format('05')
```

Out[17]: 'APSSDC Day05 Python Programming'

In [19]:
```
1 'APSSDC Day{} Python Programming{}'.format('05')
```

```
---------------------------------------------------------------------------
IndexError                                Traceback (most recent call last)
<ipython-input-19-4b1d87fbbdd0> in <module>
----> 1 'APSSDC Day{} Python Programming{}'.format('05')

IndexError: Replacement index 1 out of range for positional args tuple
```

In [18]:
```
1 'APSSDC Day{} Python Programming {}'.format('05', 'Online')
```

Out[18]: 'APSSDC Day05 Python Programming Online'

In [22]:
```
1 'APSSDC Day{0} Python Programming Day{0}'.format('05')
```

Out[22]: 'APSSDC Day05 Python Programming Day05'

In [23]:
```
1 x = 'APSSDC Day{0} Python Programming Day{0}'
2
3
4 x.format('05')
```

Out[23]: 'APSSDC Day05 Python Programming Day05'

In [25]:
```
1 x.format('06')
```

Out[25]: 'APSSDC Day06 Python Programming Day06'

In [26]:
```
1 x.format('five')
```

Out[26]: 'APSSDC Dayfive Python Programming Dayfive'

In [30]:
```
1 email
```

Out[30]: 'apssdc.india@apssdc.in'

In [31]:
```
1 email.find('@')
```

Out[31]: 12

In [33]:
```
1 email[email.find('@') + 1:].startswith('apssdc.in')
```

Out[33]: True

In [34]:
```
1 roll
```

Out[34]: '18X41A1299'

In [35]:
```
1 roll.find('12')
```

Out[35]: 6

In [36]:
```
1 help(str.find)
```

```
Help on method_descriptor:

find(...)
    S.find(sub[, start[, end]]) -> int

    Return the lowest index in S where substring sub is found,
    such that sub is contained within S[start:end].  Optional
    arguments start and end are interpreted as in slice notation.

    Return -1 on failure.
```

In [37]:
```
1 roll.find('02')
```

Out[37]: -1

In [38]:
```
1 email
```

Out[38]: 'apssdc.india@apssdc.in'

In [39]:
```
email.find('apssdc')
```

Out[39]: 0

In [44]:
```
email.find('apssdc', 1)
```

Out[44]: 13

In [45]:
```
email.find('apssdc', email.find('apssdc') + 1)
```

Out[45]: 13

Predifined Functions which can apply for strings

In [52]:
```
email
```

Out[52]: 'apssdc.india@apssdc.in'

In [50]:
```
len(email)
```

Out[50]: 22

In [51]:
```
max(email)
```

Out[51]: 's'

In [53]:
```
ord('s')
```

Out[53]: 115

In [54]:
```
min(email)
```

Out[54]: '.'

In [55]:
```
ord('.')
```

Out[55]: 46

Conditional Statements

- if
- elif
- else

syntax for if:

```
if condition:
    statement1
    statement2
    .
    .
    .
    .
    .
    .
    statementn
```

syntax for if-else:

```
if condition:
    statement1
    statement2
    .
    .
    .
    .
    .
    .
    statementn
else:
    statement1
    statement2
    .
    .
    .
    .
    .
    .
    statementn
```

In [56]:
```
a = 22
```

In [60]:
```
if a % 2 == 0:
    print("even")
    print(a)
    print('{} is a even number'.format(a))

print('Hello World')
```

```
even
22
22 is a even number
Hello World
```

In [61]:

```
if a % 2 == 1 or a % 2 != 0:
    print("Odd")
    print(a)
    print('{} is a odd number'.format(a))
else:
    print("even")
    print(a)
    print('{} is a even number'.format(a))

print('Hello World')
```

```
even
22
22 is a even number
Hello World
```

In [65]:

```
if a % 2 == 1 or a % 2 != 0:
    print("Odd")
    print(a)
    print('{} is a odd number'.format(a))
    print('Hello World')
else:
  print("even")
  print(a)
  print('{} is a even number'.format(a))

print('Hello World')
```

```
  File "<ipython-input-65-931bd5bbf4c1>", line 9
    print('{} is a even number'.format(a))
    ^
IndentationError: unexpected indent
```

In [66]:

```
if a % 2 == 1 or a % 2 != 0:
    print("Odd")
    print(a)
    print('{} is a odd number'.format(a))
    print('Hello World')
else:
  print("even")
  print(a)
    print('{} is a even number'.format(a))

print('Hello World')
```

```
  File "<ipython-input-66-931bd5bbf4c1>", line 9
    print('{} is a even number'.format(a))
    ^
IndentationError: unexpected indent
```

In [68]:

```
if a % 2 == 1 or a % 2 != 0:
    print("Odd")
    print(a)
    print('{} is a odd number'.format(a))
    print('Hello World')
else:
  print("even")
  print(a)
  print('{} is a even number'.format(a))

 print('Hello World')
```

```
  File "<tokenize>", line 11
    print('Hello World')
    ^
IndentationError: unindent does not match any outer indentation level
```

syntax for if-elif-else:

```
if condition:
    statement1
    statement2
    .
    .
    .
    .
    .
    .
    statementn

elif condition:
    statement1
    statement2
    .
    .
    .
    .
    .
    .
    statementn

else:
    statement1
    statement2
    .
    .
    .
    .
    .
    .
    statementn
```

In [69]:

```
1  roll = '18X41A1299'
2
3  if roll[:-2].endswith('12'):
4      print('roll Number {} belongs to IT department'.format(roll))
5  elif roll[:-2].endswith('02'):
6          print('roll Number {} belongs to EEE department'.format(roll))
7  elif roll[:-2].endswith('01'):
8          print('roll Number {} belongs to Civil department'.format(roll))
9  else:
10         print('roll Number {} belongs to other department'.format(roll))
11
```

```
roll Number 18X41A1299 belongs to IT department
```

Tasks

1. Write a program program to identify weather the given input email belogs to `apssdc.in` or `gmail.com` or other
    - apssdc@apssdc.in (mailto:apssdc@apssdc.in)
    - apssdc@gmail.com (mailto:apssdc@gmail.com)
    - apssdc@srkit.edu.in (mailto:apssdc@srkit.edu.in)
    - **output:** Given email `emailId` is belongs to apssdc domain
2. Write a program to identify weather the given input number is divisible by 2, 6 and 10
    - **output:** Given number `num` is divisible by 2, 6, 10

In [75]:
```
email1= 'apssdc@apssdc.in'
email2='apssdc@gmail.com'
email3='apssdc@srkit.edu.in'

email=input("enter a Domain")

if(email == email1[8:]):
    print("it belongs to apssdc")
elif(email == email1[8:]):
    print("it belongs to gmail")
elif(email == email1[8:]):
    print("it belongs to edu.in")
else:
    print('It beongs to other domain')
```

```
enter a Domainapssdc.in
It beongs to other domain
```

In [72]:
```
val = input("Enter your email")

if 'apssdc.in' in val:
     print("given emailId {} belongs to apssdc domain".format(val))
elif 'gmail.com' in val:
     print("given emailId {} belongs to gmail domain".format(val))
elif 'srkit.edu.in' in val:
     print("given emailId {} belongs to SRKIT domain".format(val))
else:
     print("given emailId {} belongs to other domain".format(val))
```

```
Enter your emailapssdc@tcs.in
given emailId apssdc@tcs.in not belongs to other
```

In [73]:
```
num = int(input("Enter a number"))

if (num % 2 == 0) and (num % 6 == 0) and (num % 10 == 0):
    print('Given number {} is divisible by 2, 6 and 10'.format(num))
else:
    print('Given number {} is not divisible by 2, 6 and 10'.format(num))
```

```
Enter a number37
Given number 37 is not divisible by 2, 6 and 10
```