

Jiacheng Yuan
ECE 364
Prelab 06
part 1

1. `re.search('^sA{2,5}$',input)`
2. `re.sub('[0-9]+\.[0-9]+','float',input)`
3. `re.findall('[0-9]+\.[0-9]+',input)`
4.

```
num = re.findall('[+|-]?[0-9]+',input)
ct = 0
for n in num:
    sum += int(n)
    ct++
avg = sum/ct
```
5. `re.sub('ECE364','ECE461',input,1)`
6.

```
if len(re.split('\.',input)) == 4:
    num = re.split('\.',input)
    for n in num:
        if re.match('^([01][0-9][0-9]|^2[0-4][0-9]|^25[0-5]|^[0-9][0-9]|^[0-9])$', '010') ==
```

'None':

return invalid

return valid

7.

`re.search("e", input, re.I)`

search letter e in the input ignore upper and lower case

`re.match("(.*)(is a)(.*)", input)`

check if input is in a format of "something is a something"

`re.match("(?P<First>.*)(?P<Second>is a)(?P<Third>.*)", input)`

something with `re.match("(.*)(is a)(.*)", input)` but put them in group

group 0: something is a something

group First: something before "is a"

group Second: is a

group Third: something after "is a"

`re.search("(I){1}(like){10,}(you){1,2}", input)`

search input see if there is one "I", and ten or more "like", and one or two "you"