After if else and loops:

1) For loop to print the first 5 integers from 0 to 4.

2) Create a list of the first 10 integers from 1 to 10 and iterate over the list to remove the even numbers.

3) Write a list comprehension to print the first 5 square integers ie (1, 4, 9, 16, 25)

After functions

4) Write a function that takes
   as input a list and prints the
list element by element. Bonus: in reverse order.

5) Write a function that takes a
   list and an index and returns
   the values of the neighbours.
   eg for [1,2,3] and index 1 should
   return [1,3]

6) Write a function that takes a
   string and returns every other
   letter eg: input 'stars' output 'sas'

Solutions

1)
```
for i in range(5):
        print(i)
```

2)

```
l = [element for element in range(1,11) if (element % 2) != 0]
```

3)
```
l = [x*x for x in range(1,6) ]
```

4)
```
def print_list ( l ) :
    for i in range(len(l)):
        print( l[i] )
```

4) Bonus:

```
def print_list_reverse(l):
    for i in range(len(l)-1, -1, -1):
        print(l[i])
```

first index

last index -1

step

want to go from (length of list - 1) down to 0 inclusive

remember what appears as the second limit is not inclusive eg: print(range(1,3)) outputs [1,2] (3 not included)

```
5) def neighbours (l, i):
        if i == len(l)-1:
            return [l[i-1]]
        elif i == 0:
            return [l[i+1]]
        else:
            return [l[i-1], l[i+1]]
```

```
6) def every_other (str):
        count = 0
        result = ''
        for letter in str:
            if count % 2 == 0:
                result = result + letter

            count += 1
        return result
```