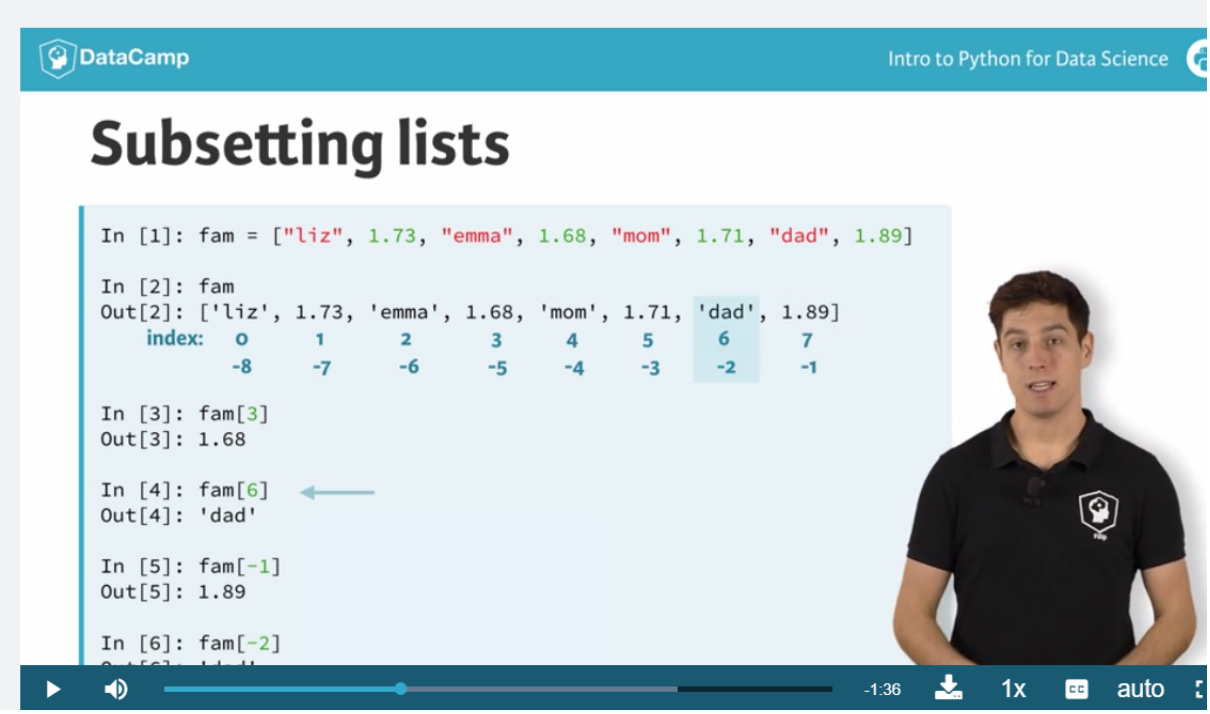
Some Python code

1 Subsetting List



List Slicing :

```
list['liz', 1.73, 'emma', 1.68, 'mom', 1.71, 'dad', 1.89]
list[3:5]
//Terminate:
[1.68, 'mom'
```

2 Add to list

```
# Create the areas list and make some changes
areas = ["hallway", 11.25, "kitchen", 18.0, "chill zone", 20.0,
         "bedroom", 10.75, "bathroom", 10.50]

# Add poolhouse data to areas, new list is areas_1
areas_1 = areas + ["poolhouse", 24.5]
print(areas_1)
```

```
# Add garage data to areas_1, new list is areas_2
areas_2 = areas_1 + ["garage", 15.45]
print(areas_2)
```

3 Delete list element

```
x = ["a", "b", "c", "d"]
del(x[1])
print(x)
```

Then we have:[‘b’,‘c’,‘d’]

4 Inner workings on lists

```
# Create list areas
areas = [11.25, 18.0, 20.0, 10.75, 9.50]

# Create areas_copy
areas_copy = areas

# Change areas_copy
areas_copy[0] = 5.0

# Print areas
print(areas)
```

5 Print type of Function

```
result = type(3.0)
# Assign type of function 3.0 for variable ‘result’
print(result)
# Print ‘result’
```

6 Length of type

```
result = 3.0 + 2.5
# Assign the value for result
print(len(result))
# Print the length of 'result'
```

7 Show Help in Python

```
# Show sth about the code you need
help(function,...)
```

8 Sorted

```
# sorted() take three arguements(iterable,key,reverse)
# If you don't spectify anything in sorted() then key=None, reverse=true
(decending order)
sorted(iterable, [key], [reverse=])
```

9 Upper Method

```
 # Upper String [str.upper]
room = 'poolhouses'
room_up = room.upper()
 # Print room_up
print(room_up)
```

10 Count Method

```
 # Count the string str.count([substr or str], start=, end=len(str))
 print(room.count(''o''))
```

11 List Method

```
 # Index Method
areas = [11.25, 18.0, 20.0, 10.75, 9.50]
```

```
 # Print Index of 20.0
print(areas.index(12.0))
 # Print Count of 14.5
print(areas.count(14.5))
 # Add an elemenet to the list it is called on
print(areas.append(23.00))
 # Remove an element to the list that matches the input
print(areas.remove(10.75))
 #Reverse the order of the elements in the list it is called on.
print(areas.reverse())
```

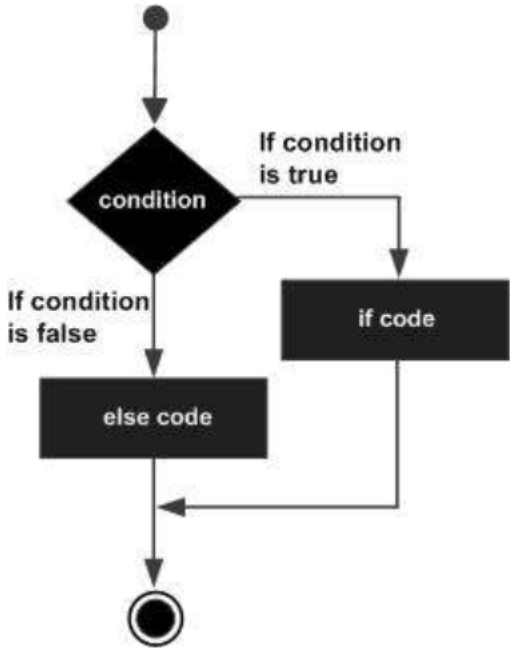
12 Numpy

```
# Create list baseball
baseball = [180, 215, 210, 210, 188, 176, 209, 200]

# Import the numpy package as np
import numpy as np

# Create a numpy array from baseball: np_baseball
np_baseball = np.array(baseball)

# Print out type of np_baseball
print(type(np_baseball))
# Print out dtype of np_baseball
print(type(np_baseball.dtype))
```

13 If-else in Python

```
if [expression]:
        statement(s)
else:
        statement(s)
```

Flow Diagram



14 While-For

```
while [expression]:
    statements
```

15 Numpy Array

```
# To use NumPy array we import NumPy package
import numpy as np
# create a list
height = [12.45,78.90,34.56,56.78]
# Use np.array(...) to make NumPy array
np_height = np.array(height)
# We can add function in array
np_height_m = np_height * 0.05
print(np_height_m)
```