**17/03/2019 Lecture20**

>>> import pickle >>> input\_dict={"a":1,"b":2} >>> serialised\_stream=pickle.dumps(input\_dict) >>> serialised\_stream "(dp0\nS'a'\np1\nI1\nsS'b'\np2\nI2\ns." >>> deserialised\_stream=pickle.loads(serialised\_stream) >>> deserialised\_stream {'a': 1, 'b': 2} >>>

>>> import pickle

>>> input\_dict={"a":1,"b":2,"c":3}

>>> fd=open("serialise.out","wb")

>>> pickle.dump(input\_dict,fd)

>>> input\_dict={"d":4,"e":5}

>>> pickle.dump(input\_dict,fd)

>>> fd.close()

>>> fd=open("serialise.out","rb")

>>> deserialised\_stream=pickle.load(fd)

>>> deserialised\_stream

{'a': 1, 'c': 3, 'b': 2}

>>> deserialised\_stream=pickle.load(fd)

>>> deserialised\_stream

{'e': 5, 'd': 4}

>>>

**#WAP to read an excel sheet and create VCF format**

**(Program Emailed by Jeetendra Sir)**

**install openpyxl**

**import openpyxl in program and use its methods.**

**#Object Oriented Programming**

What is Object oriented programming?

What is an object?

Object oriented programming properties/concepts explained –

**Abstraction** – hinding properties/functionality.

**Encapsulation** – Encapsulate properties/functionality.

**Polymorphism** – Runtime behaviour of an object

Read more about polymorphism and Inheritance.