FDS PROGRAM-2

1)

```
import pandas as pd
structured_data=pd.DataFrame({
   'Name':['Alice','Bob','Charlie'],
   'Age':[25,30,35]
})
print("Structured Data:\n",structured_data)
```

```
Structured Data:
       Name  Age
0    Alice   25
1      Bob   30
2  Charlie   35
```

2)

```
import pandas as pd
semi_structured_data="This is an example of unstructured data.It can be a place of test,an image or a video file"
print("\nUnsubscribe Data:\n",unstructured_data)
semi_structured_data={'ID':1,'Name':'Alice','Attributes':{'Height':165,'Weight':68}}
print("\nsemi structured data\n",semi_structured_data)
```

```
Unsubscribe Data:
 This is an example of unstructured data.It can be a place of test,an image or a video file

semi structured data
 {'ID': 1, 'Name': 'Alice', 'Attributes': {'Height': 165, 'Weight': 68}}
```

3)

```
import pandas as pd
structure_data =pd.DataFrame({
   'name':['manu','manoj','ikram'],
   'age':[18,19,29],
   'id':[179,178,188]
})
print(structure_data)
```

```
    name  age   id
0   manu   18  179
1  manoj   19  178
2  ikram   29  188
```

4)

```
import pandas as pd
data='{"name":"manu","id":179,"age":18}'
print(data)
```

```
{"name":"manu","id":179,"age":18}
```

5)

```
print("this is unstructured data")
```

```
this is unstructured data
```

6)

```
from cryptography.fernet import Fernet
key=Fernet.generate_key()
f=Fernet(key)
token=f.encrypt(b"manu")
token
```

b'...'

```
f.decrypt(token)
```

b'manu'

```
key=Fernet.generate_key()
cipher_suite=Fernet(key)
plain_text=b"manu"
cipher_text=cipher_suite.encrypt(plain_text)
decrypted_text=cipher_suite.decrypt(cipher_text)
print("original data",plain_text)
print("encrypted data",cipher_text)
print("decrypted data",decrypted_text)
```

```
original data b'manu'
encrypted data b'gAAAAABmtEQLJgZEssO08yAfRbtU2_a0_4JvjUY8maz2GcFqfQLsxc4KDEOlRGwUaSicLiDEnLDMby2MmkIOMibKVFl8kPs43g=='
decrypted data b'manu'
```