Lab 18

Question 1: File comprehension in Python

```
>>> list1 = [1, 2, 3, 4]
>>> [i**3 for i in list1]
[1, 8, 27, 64]
>>>
```

Question 2: Tuple File Comprehension in Python

```
>>> def fv(principal, rate, time):
...     curr = principal * ((1 + rate) ** time)
...     return curr
...
>>> tuple1 = [(1,2,3), (4,5,6)]
```

Answer:
```
>>> [fv(i,j,k) for i,j,k in tuple1]
[27, 186624]
```

Question 3: Python function for abbreviation

```
>>> def abbreviation(input):
...     str = ""
...     for i in input:
...             if (i.isupper()):
...                     str+=i
...     return str
...
>>> string1 = "Hello Darkness My Old Friend"
>>> abbreviation(string1)
'HDMOF'
>>>
```

Question 4:

```
Prelude> [x*x*x | x <- [1..4]]
[1,8,27,64]
Prelude>
```

Question 5:

```
Prelude> [x | x <- "Hello Darkness My Old Friend", x `elem` ['A'..'Z']]
"HDMOF"
```