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Subject- letsupgrade python batch 7 Day 6 Assignment

Question 1

For this challenge,create a bank account class that has two attributes

*ownerName

*Balance

And two methods

*deposit

*withdraw

As an added requirement,withdrawals may not exceed the available balance.Instantiate your class,make several deposits and withdrawals,and test to make sure the accountcant be overdrawn.

```python
class bankaccount:
    def __init__(self,ownerName,balance):
        self.ownerName=ownerName
        self.balance=balance
    def deposit(self,dep):
        self.balance=self.balance+dep
        return 'your account is deposited with '+str(dep)+' and the available balance is '
    def withdraw(self,wdr):
        if wdr>self.balance:
            return 'your account doesnt have sufficient balance'
        else:
            self.balance=self.balance-wdr
            return str(wdr)+' is withdrawn and the balance remaining is '+str(self.balance
```

```python
myaccount=bankaccount('Tarun',85000)
```

```python
myaccount.deposit(45000)
```

```
'your account is deposited with 45000 and the available balance is 130000'
```

```
myaccount.withdraw(100000)
```

⌐→   '100000 is withdrawn and the balance remaining is 30000'

```
myaccount.withdraw(50000)
```

⌐→   'your account doesnt have sufficient balance'

```
myaccount.deposit(50000)
```

⌐→   'your account is deposited with 50000 and the available balance is 80000'

```
myaccount.withdraw(65000)
```

⌐→   '65000 is withdrawn and the balance remaining is 15000'

Question 2

For this challenge,create a cone class that has two attributes:

*R=Radius

*h=Height

And two methods:

*Volume = Π * r2 = (h/3)

*Surface area : base : Π * r2 , side : Π * r * √(r2 + h2)

Make only one class with functions,as in where required import Math.

```
import math
class cone:
    def __init__(self,r,h):
        self.r=r
        self.h=h
    def volume(self):
        return math.pi*self.r*self.r*(self.h/3)
    def surface_area(self):
        return math.pi*self.r*(self.r+math.sqrt(self.h**2+self.r**2))

c=cone(5,6)
```

```
c.volume()
```

```
157.07963267948966
```

```
c.surface_area()
```

```
201.22293136239685
```