

① class Student:

def __init__(self, name, sub1, sub2, sub3):

self.name = name

self.sub1 = sub1

self.sub2 = sub2

self.sub3 = sub3

def calculateResult(self):

average = 0

if self.sub1 > 40 and self.sub2 > 40 and self.sub3 > 40:

average = (self.sub1 + self.sub2 + self.sub3) / 3

return average

class School:

def __init__(self, sch_name, studentDict):

self.sch_name = sch_name

self.studentDict = studentDict

def getStudentResult(self):

passed_student = []

for i in self.studentDict:

if i.calculateResult() > 60:

self.studentDict[i] = 'pass'

passed_student.append(i.name)

return passed_student

def findStudentWithHighestMarks(self):

maximum = 0

for i in self.studentDict:

if i.calculateResult() > maximum:

maximum = average

topper = i.name

return topper

```

if __name__ == '__main__':
    count = int(input())
    studentDict = {}
    for i in range(count):
        name = input()
        sub1 = float(input())
        sub2 = float(input())
        sub3 = float(input())
        studentDict[Student(name, sub1, sub2, sub3)] = 'fail'
    sch-name = input()
    s = School(sch-name, studentDict)
    p = s.getStudentResult()
    if p:
        for j in p:
            print(j)
        print(s.hadStudentWithHighestMarks())
    else:
        print('No Student Passed')

```

```

② class container:
    def __init__(self, cid, length, breadth, height, pricepersqft):
        self.cid = cid
        self.length = length
        self.breadth = breadth
        self.height = height
        self.pricepersqft = pricepersqft

    def findvolume(self):
        return self.length * self.breadth * self.height;

```

```

class PackagingCompany:
    def __init__(self, containerlist):
        self.containerlist = containerlist;

    def findcontainercost(self, iid):
        for con in self.containerlist:
            if (con.cid == iid):
                return con.findvolume() * con.pricepersqft;

        return None

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    def findlargestContainer(self):

```

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        vol = 0;

```

```

        obj = None;

```

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        for con in self.containerlist:

```

```

            if (con.findvolume() > vol):

```

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                vol = con.findvolume()

```

```

                obj = con;

```

```

        return obj

```



```
containerList = []
```

```
n = int(input())
```

```
for i in range(n):
```

```
    cid = int(input())
```

```
    length = int(input())
```

```
    breadth = int(input())
```

```
    height = int(input())
```

```
    pricePerSqrFt = int(input())
```

```
    containerList.append(Container(cid, length, breadth,  
                                    height, pricePerSqrFt))
```

```
pc = packagingcompany(containerList)
```

```
cid = int(input())
```

```
x = pc.findContainerCost(cid)
```

```
if x != None:
```

```
    print(x)
```

```
else:
```

```
    print("No such container found")
```

```
y = pc.findLargestContainer()
```

```
print(y.cid, end=" ")
```

```
print(y.findVolume())
```