① Define the principle of cohesion.

② Define layered architecture and what GRASP patterns must
be fulfilled. Give example.

③ a)Define Black Box testing. ←
   b) ~~def~~ test the function using:
   def isPerfectSquare (m):
      o o o

④ a) What are the locals and globals of the following
function.
   b) What prints the fct. and why? Explain.

```
def f(x,y)
   global a
   a = 2
   b = 3
   c = 4
   x,y = y,x
   print ( a, b, x, y)
a,b,x,y = 11, 22, 33, 44

f(19, 31)
print (a, b, x, y)
```
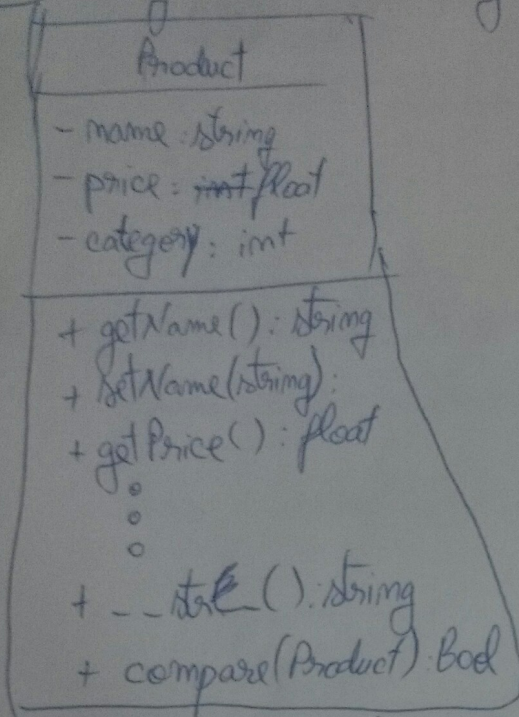
5) Using the UML diagram write the code for class Product.

```
              Product
    - name : string
    - price : int/float
    - category : int

    + getName() : string
    + setName(string) :
    + getPrice() : float
        o
        o
        o
    + __str__() : string
    + compare(Product) : Bool
```

6) Write Repository for class Product with:
   a) CRUD operations
   b) two fcts: search products with price above given limit
      search products from same category

7) Implement a function that sorts products (from previous exercise 5)) by their price:
   a) selection sort
   b) built-in python sort function   (not specified if ascending or descend)
   What is the complexity of the algorithm? Justify your answer