

1.

Functions
+ intNumber: int = 0 intSum:int = 0 intProduct:int = 1
+ Functions(intNum1:int) + Functions(dblNum1:double) + Functions(intNum1:int, intNum2:int) + Functions(intNum1:int, dblNum2:double) + Functions(dblNum1:double, intNum2:int) + Functions(dblNum1:double, dblNum2:double) + area(intNum1:int, intNum2:int):int "intNum1 * intNum2" + area(intNum1:int, dblNum2:double):double "intNum1 * intNum2" + area(dblNum1:double, intNum2:int):double "intNum1 * intNum2" + area(dblNum1:double, dblNum2:double):double "intNum1 * intNum2" + perfectnumber(intNum1:int):int "supply the code" + fibonaccirecursion(intNum1:int):int "supply the code" + area(intNum1:int):int "intNum1 * intNum1"

2.

UserFunctions overrides Functions
+ area(intNum1:int, intNum2:int):int "intNum1 % intNum2"

3.

AnimalAbstract (abstract)
+ intAge: int = 10 + strKind:String = null
+ animalsound(strKind:String): void + animalskin(strKind:String):void + animalage(intAge:int):int "convert to months" + animalfeet(strKind:String):void "if strKind = 'Dog' or 'Cat' then '4 feet' else if strKind = 'Bird' then '2 feet' else if strKind = 'Fish' then 'tail' else 'cannot distinguish'"

4.

Logarithmic
- intNum1:int = 0
+ Logarithmic() + Logarithmic(intNum:int) + getNumber():int + setNumber(intNum:int):void + computeLn(intNum:int):double " ln(n!). Note: ln(n*n-1*n-2*.....*2*1) = ln(n)+ln(n-1)+.....+ln(2)+ln(1). You may use Math.log() function in replace of ln(). Sample Output: n=3 the answer is 1.79."

5.

AnimalInterface (interface)
+ intAge: int = 5 + strKind:String = null
+ animalsound(strKind:String):void + animalskin(strKind:String):void + animalage(intAge:int):int + animalfeet(strKind:String):void

6. Create 4 objects each using AnimalAbstract and AnimalInterface and provide your own method Body or definition: **Dog, Cat, Bird, Fish**