COCOMO II MODEL

We use the **COCOMO II model** to estimate the efforts required to build for library management system software that produces 12 screens, 10 reports, and will require approximately 80% (assume) as new software components. We assume average (medium) complexity and average developer/ environment maturity.

Object points:

Complexity Weight

Object type	Simple	Medium	Difficult
Screens	1	2	3
Report	2	5	8
3GL components			10

The object points of medium for screen is 2 and for report is 5 we use in weight factor.

Object	Count	Complexity	Weight Factor	Total Objects
Screen	12	Medium	2	24
Report	10	Medium	5	50
3GL Components	0	NA	NA	0

Total Object Points: 74

It is given that 80% of components have to be newly developed. So remaining 20% can be reused.

New object point (NOP):

NOP = (object points)*[(100- %reuse)/100]

NOP = 74* (100-20)/100

= 74*80/100

NOP = 59.2object points

Since productivity is given average, we can assume **PROD=13**

effort = NOP/PROD

effort = 59.2/13

effort = 4.55 person months

Hence,4.55 (effort) person months is taken for development.