COST ESTIMATION

We use the COCOMO 2 software model to estimate the efforts required to build for Relative Grading System software that produces 8 screens, 1 report, and will require approximately 80% (assumption) 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 the medium for the screen is 2 and for report is 5 we use the weight factor.

OBJECT	COUNT	COMPLEXITY	WEIGHT FACTOR	TOTAL OBJECTS
Screens	9	Medium	2	18
Reports	7	Medium	5	35
3GL Components	0	NA	NA	0

Total Object Points: 53

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 = 53*(100-20)/100

= 53*80/100

NOP = 42.4 object points

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

Effort=NOP/PROD

Effort=42.4/13

Effort= 3.26

Hence, 3.26 (effort) person months is taken for development.