**Assignment # 2**

**Effect Adjustment Factor (EAF)**

1. **Good Size Database:** Let Assume good size Database = **Nominal**
2. **System Reliability:** Average = **High**
3. **Definitive Schedule for Development:** **Very High** (Because in Embedded mode time period is Tight and also required module are common).

**Effect Adjustment Factor (EAF)**

EAF = F \* F \* F \* …

EAF = 1.0 \* 1.15 \* 1.10

EAF = 1.265

**Effort calculation in Person-Month**

E = ai \* (KLOC)bi \* EAF

E = 2.8 \* (15331556.060)1.20 \* 1.265

E = 1485771554.04

**Development Time Calculation in Month**

D = ci \* (E)di

D = 2.5 \* (1485771554.04)0.32

D = 2152.61

**Staff Size Calculation (SS)**

SS = E/D

SS = 1485771554.04/2154.61

SS = 689577.95

**Productivity Calculation (P)**

P = KLOC/E

P = 15331556.060 /1485771554.04

P = 0.0103

**Phase wise Calculation (Embedded for Extra Large)**

1. **Effort (Ep)= µp \* E**

**Plan & Requirement** = 0.08 \* 1485771554.04 = 118861724.32

**System Design** = 0.18 \* 1485771554.04 = 267438879.72

**Detail Design** = 0.24 \* 1485771554.04 = 356585172.96

**Module Code & test** = 0.24 \* 1485771554.04 = 356585172.96

**Integration and test** = 0.34 \* 1485771554.04 = 505162328.37

1. **Development Time (Di) = Ƭp \* D**

**Plan & Requirement** = 0.40 \* 2152.61 = 861.044

**System Design** = 0.38 \* 2152.61 = 817.91

**Detail Design** = 0.16 \* 2152.61 = 344.41

**Module Code & test** = 0.16 \* 2152.61 = 344.41

**Integration and test** = 0.30 \* 2152.61 = 645.78

1. **Staff Size (SS) = E/D**

**Plan & Requirement** = 118861724.32/861.044 = 138043.73

**System Design** = 267438879.72/817.91 = 326978.37

**Detail Design** = 356585172.96/ 344.41= 1035350.81

**Module Code & test** = 356585172.96/ 344.41= 1035350.81

**Integration and test** = 505162328.37/645.78 = 782251.42

1. **Productivity (P) = KLOC/E**

**Plan & Requirement** = 15331556.060 / 118861724.32 = 0.12

**System Design** = 15331556.060 / 267438879.72 = 0.05

**Detail Design** = 15331556.060 / 356585172.96 = 0.043

**Module Code & test** = 15331556.060 / 356585172.96 = 0.043

**Integration and test** = 15331556.060 / 505162328.37 = 0.303