

[Function Point \(FP\)](#) is an element of software development which helps to approximate the cost of development early in the process. It may measures functionality from user's point of view.

Calculating Function Point (FP):

- **Step-1:**

$$F = 14 * \text{scale}$$

Scale varies from 0 to 5 according to character of Complexity Adjustment Factor (CAF).

Below table shows scale:

0 - No Influence

1 - Incidental

2 - Moderate

3 - Average

4 - Significant

5 - Essential

- **Step-2:**

Calculate Complexity Adjustment Factor (CAF).

$$CAF = 0.65 + (0.01 * F)$$

- **Step-3:**

Calculate Unadjusted Function Point (UFP).

TABLE

Function Units	Low	Avg	High
EI	3	4	6
EO	4	5	7
EQ	3	4	6
ILF	7	10	15
EIF	5	7	10

Multiply each individual function point to corresponding values in TABLE.

Types of FP Attributes

Measurements Parameters	Examples
1.Number of External Inputs(EI)	Input screen and tables
2. Number of External Output (EO)	Output screens and reports
3. Number of external inquiries (EQ)	Prompts and interrupts.
4. Number of internal files (ILF)	Databases and directories
5. Number of external interfaces (EIF)	Shared databases and shared routines.

- **Step-4:**

Calculate Function Point using **FP = UFP * CAF**

Example:

Given the following values, compute function point when all complexity adjustment factor (CAF) and weighting factors are average.

User Input = 50

User Output = 40

User Inquiries = 35

User Files = 6

External Interface = 4

Explanation:**Step-1:**

As complexity adjustment factor is average (given in question), hence, scale = 3.

$$F = 14 * 3 = 42$$

Step-2:

$$CAF = 0.65 + (0.01 * 42) = 1.07$$

Step-3:

As weighting factors are also average (given in question) hence we will multiply each individual function point to corresponding values in TABLE.

$$UFP = (50*4) + (40*5) + (35*4) + (6*10) + (4*7) = 628$$

Step-4

$$\text{Function Point} = UFP * CAF$$

$$= 628 * 1.07$$

$$= \underline{\underline{671.96}}$$