***Name: Noman Siddique***

***Roll Number: 19P1664***

***Subject: Software Design and Architecture***

***Lab Task: 10***

***Instructor: Usama Musharraf***

***Architecture Evaluation (Quantitatively)***

***Size Metrics***

|  |  |  |
| --- | --- | --- |
| **NO Of Components** | **Services** | **NO OF OPERATIONS IN A COMPONENT** |
| 1 | Register/login | 2 |
| 2 | Appointment | 4 |
| 3 | Medical history | 3 |
| 4 | Medicine | 2 |
| 5 | Test | 2 |
| 6 | Bill | 3 |

**No of component** =6

**No of Operation in system**=16

***Coupling Metrics***

|  |  |  |  |
| --- | --- | --- | --- |
| **NO of Component** | **NO OF COMPONENT** | **DIRECT COUPLING** | **INDIRECT COUPLING** |
| 1 | Register/login | 6 | 0 |
| 2 | Appointment | 0 | 1 |
| 3 | Medical history | 1 | 2 |
| 4 | Medicine | 1 | 0 |
| 5 | Test | 1 | 0 |
| 6 | Bill | 2 | 0 |

**Total Coupling** =14

**Coupling factor= copF(Sys)=Tcoup / (f^2)-f**

f=6+16=22

= =14 / (22^2) +22=0.0303…..