

LAB2 (ADDITIONAL)

EXERCISE 1

2.15 Pointers to structure are created by taking the address of a structure variable and create variables that are pointers to the structures.

[Penuding struktur dicipta dengan mengambil alamat pembolehubah struktur dan mencipta pembolehubah yang menunjuk kepada struktur tersebut.]

16. Type in the following code. Study the code and run the program.
[Taip kod berikut.. Fahamkan aturcara tersebut dan laksanakaninya.]

```
1
2 #include <iostream>
3 using namespace std;
4
5 int main(){
6     struct LecturerInfo{
7         string name;
8         char room[10];
9         int extension;
10    } ;
11    struct Lecturer{
12        int ID;
13        LecturerInfo contact;
14        string department;
15        char facultyCode[10];
16    };
17    Lecturer dayang = {1234, {"Dayang Norhayati", "306-06",
18                            32354}, "Software Engineering", "FSKSM"};
19
20    Lecturer *me;
21    me = &dayang;
22    cout<<me->contact.name<<endl;
23    cout<<me->department;
24    return 0;
25 }
```

Program 7.2

- i. Define an array of structure variable called **lecturerTP2** (maximum size 10) with the initialized values as follows.
[Takrifkan pembolehubah tatasusunan berstruktur bernama **lecturerTP2** (saiz maximum 10) dengan nilai permulaan seperti berikut.]

Table 7.3

ID	name	room	extension	department	facultyCode
1234	Dayang Norhayati	305-03	32354	Software Engineering	FC
5678	Norazah Yusof	305-06	32341	Software Engineering	FC
9101	Haswadi Hasan	438-08	32374	Computer Science	FC

- ii. Define a pointer variable to point to the third element of the array.
[Takrifkan pembolehubah penuding yang menunjuk kepada elemen ketiga tatasusunan.]
- iii. Add your lecturer or other Programming Technique II lecturer into the array using the pointer variable defined in (ii).
[Tambah pensyarah anda atau pensyarah Teknik Pengaturcaraan II yang lain ke dalam tatasusunan tersebut dengan menggunakan penuding yang ditakrifkan di (ii).]
- iv. Print all contents of the array using **lecturerTP2** variable.
*[Cetak kesemua kandungan tatasusunan dengan menggunakan pemboleh ubah **lecturerTP2**.]*