

# HOMEWORK – ADVANCED PROGRAMMING

## Topic: Pointer (Part 1)

Name: Thái Minh Huy

Student ID: 23127379

### Practice 2.3

Given the following program:

```
int main()
{
    double m[100];
    double *p1, *p2;
    p1 = m;
    p2 = &m[6];
}
```

Explain:

- Initialize the double array with 100 elements.
  - Initialize two double pointers with p1 will point to the first element of the array (m[0]), p2 will point to the seventh element of the array (m[6])
  - To know how many bytes between two pointers, we will use “Subtracting two pointers” operator.
    - We let “p2 – p1” will give us the value 6 which means the distance between them is 6.
    - But we have a double variable storing 8 bytes.
- ⇒ From p1 and p2, there are  $6 * 8 = 48$  bytes between them.