程式設計練習

查詢數字

```
#include<iostream>
using namespace std;

int main() {
    int integer[5], search,q=0;
    cout << "請輸入整數:"<<endl;
    for (int i = 0;i < 5;i++) {
        cout << i + 1<<":";
        cin >> integer[i];
    }
    cout << "輸入查詢數字:";
    cin >> search;
    for (int j = 0;j < 5;j++) {
        if (search== j){
            q = integer[j-1];
            break;
        }
        else if(search==0){
            break;
        }
        else {
            continue;
        }
    }
    cout << q;
}
```

2.查詢範圍內數字的練習

```
#include<iostream>
using namespace std;
int main() {
    int integer[5];
    int ans[5];
    int L, R;
    for (int i = 0;i < 5;i++) {
        cin >> integer[i];
    }
    for (int k = 1;k > 0;k++) {
        cout << "L R:";
        cin >> L >> R;
        if (L == 0 && R == 0) {
            cout << "結束...";
            break;
        }
        cout << "ans=";
        for (int j = 0;j < 5;j++) {
            if (integer[j] >= L && integer[j] <= R) {
                ans[j] = integer[j];
                cout<<ans[j]<<" ";
            }
        }
        cout << endl;
    }
}
```

3.找出距離最近的數

```
#include<iostream>
#include <cstdlib>//數學函數
using namespace std;

int main() {
    int integer[5],Q,val=0;
    for (int i = 0;i < 5;i++) {
```

```
        cin >> integer[i];
    }
    cout << "Q:";
    cin >> Q;
    val = integer[0];
    int valdiff = abs(integer[0] - Q);
    for (int j = 1;j <5;j++) {
        if(valdiff > abs(integer[j] - Q)){
            val = integer[j];
            valdiff = abs(integer[j] - Q);
        }
        if (valdiff == abs(integer[j] - Q) && val < integer[j]) {
            val=integer[j];
        }
    }
    cout << val;
}
```

4.查詢重複次數最多

```
#include <iostream>
using namespace std;

int main() {
    int integer[5],repeat[5];
    for (int i = 0;i < 5;i++) {
        cin >> integer[i];
    }
    for (int j = 0;j <5;j++) {
        int sum = 0;
        for (int k = 0;k < 5;k++) {
            if (integer[j] == integer[k]) {
                sum++;
                repeat[j] = sum;
            }
        }
    }
    int value=integer[0];//重複數值對比
```

```
    int rel = repeat[0];
    for (int a =0;a < 4;a++) {
        if (rel > repeat[a+1]){
            continue;
        }
        else if(rel < repeat[a+1]){
            value = integer[a + 1];//重複最多的數字
            rel=repeat[a+1];//重複次數
        }
        if (rel == repeat[a + 1] && value > integer[a + 1])
            value = integer[a + 1];
    }
    cout << value;
}
```

5.輸入1-100的數字 畫出每個區間的長條圖

```
#include<iostream>
using namespace std;
int main() {
    int integer[10];
    for (int i = 0;i < 10;i++) {
        cin >> integer[i];
    }
    for (int j = 0;j < 10;j++) {
        cout << (j * 10) + 1 << "-" << (j + 1) * 10 << ":";//先印1-10
        for (int k = 0;k < 10;k++) {
            if (integer[k] >= (j * 10) + 1 && integer[k] <= (j + 1) * 10) { //將integer[0]
                cout << "*";
            }
        }
        cout << endl;
    }
}
```