Question a

- 計算兩點A(a1,a2) , B(b1,b2)距離是否大於Dist
- Input :
  - A(a1,a2) B(b1,b2) (註：a1 a2 b1 b2皆為int)
  - Dist(註：Dist為float)
- Output : > 或 = 或 <

```
Please input Point A and Point B: A(1,1) B(2,2)
Please input Dist: 1
>
Process returned 0 (0x0)   execution time : 17.002 s
Press any key to continue.
```

```
Please input Point A and Point B: A(1,1) B(2,2)
Please input Dist: 2.1
<
Process returned 0 (0x0)   execution time : 16.091 s
Press any key to continue.
```

```
Please input Point A and Point B: A(8,5) B(4,2)
Please input Dist: 5
=
Process returned 0 (0x0)   execution time : 13.706 s
Press any key to continue.
```

Question b

- Given an integer $n = d_9 \cdots d_2 d_1 d_0$, where each d_i is a decimal digit,
- n 為**10位**數字, n >= 0
- 請計算Sum = $d_9 - d_8 + d_7 - d_6 + d_5 - d_4 + d_3 - d_2 + d_1 - d_0$
- Input: n(n為int)
- Output: $d_9 - d_8 + d_7 - d_6 + d_5 - d_4 + d_3 - d_2 + d_1 - d_0$ = sum

```
Please input n: 1234567890
1 - 2 + 3 - 4 + 5 - 6 + 7 - 8 + 9 - 0 = 5
Process returned 0 (0x0)   execution time : 5.175 s
Press any key to continue.
```

Question c

- Given an integer $n = d_8 \cdots d_2 d_1 d_0$, where each d_i is a decimal digit,
- n 為**9位**數字, n >= 0
- 請計算Sum = (...(($d_0 \times 10 + d_1$) $\times 10 + d_2$)...) $\times 10 + d_8$
- Input: n
- Output: sum

```
Please input n: 147258369
963852741
Process returned 0 (0x0)   execution time : 17.899 s
Press any key to continue.
```

Question d

- 費氏數列定義為以下：
  $F_0 = 0$
  $F_1 = 1$
  $F_n = F_{n-1} + F_{n-2}$

- 請計算F_n (0<= n <= 10)

- Input : n

- Output : F_n

```
Please input n: 10
55
Process returned 0 (0x0)   execution time : 1.710 s
Press any key to continue.
```

Question e

- 輸入 a, b, c, d (皆為int) 然後計算 Ans = a + b * c – d
- (此題不用考慮overflow，直接計算即可)
- Input : a , b, c, d
- Output : Ans

```
Please input a b c d: 1 2 3 4
3
Process returned 0 (0x0)   execution time : 5.027 s
Press any key to continue.
```

Question f(Bonus)

- Given an integer $n = d_9 \cdots d_2 d_1 d_0$, where each d_i is a decimal digit,

- n 為**10位**數字, n >= 0

- 請計算Sum = (...(($d_0 \times 10 + d_1$) × 10 + d_2)...) × 10 + d_8，Sum是 int

- 若Sum無overflow印Sum

- 若Sum overflow 印出 overflow

- Input: n

- Output: sum 或 overflow

```
Please input n: 1234567899
overflow
Process returned 0 (0x0)   execution time : 5.067 s
Press any key to continue.
```

```
Please input n: 9876543211
1123456789
Process returned 0 (0x0)   execution time : 3.159 s
Press any key to continue.
```