Quiz 2

COMP9021 Principles of Programming

2013 session 1

Sample outputs

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$ a.out
Enter a first number at most equal to 1023: 0
Enter a second number at most equal to 1023: 0
Enter a third number at most equal to 1023: 0
The largest distance between two consecutive digits in one of the sets
    {}
    {}
    {}
(modulo 10, i.e., considering that 0 follows 9) is equal to 0.
$ a.out
Enter a first number at most equal to 1023: 16
Enter a second number at most equal to 1023: 64
Enter a third number at most equal to 1023: 1
The largest distance between two consecutive digits in one of the sets
    {4}
    {6}
    {0}
(modulo 10, i.e., considering that 0 follows 9) is equal to 10.
$ a.out
Enter a first number at most equal to 1023: 5
Enter a second number at most equal to 1023: 6
Enter a third number at most equal to 1023: 7
The largest distance between two consecutive digits in one of the sets
    {0, 2}
    {1, 2}
    {0, 1, 2}
(modulo 10, i.e., considering that 0 follows 9) is equal to 9.
```

```
$ a.out
Enter a first number at most equal to 1023: 1023
Enter a second number at most equal to 1023: 1023
Enter a third number at most equal to 1023: 1023
The largest distance between two consecutive digits in one of the sets
     {0, 1, 2, 3, 4, 5, 6, 7, 8, 9}
     {0, 1, 2, 3, 4, 5, 6, 7, 8, 9}
     {0, 1, 2, 3, 4, 5, 6, 7, 8, 9}
(modulo 10, i.e., considering that 0 follows 9) is equal to 1.
$ a.out
Enter a first number at most equal to 1023: 1023
Enter a second number at most equal to 1023: 1022
Enter a third number at most equal to 1023: 1023
The largest distance between two consecutive digits in one of the sets
     {0, 1, 2, 3, 4, 5, 6, 7, 8, 9}
     {1, 2, 3, 4, 5, 6, 7, 8, 9}
     {0, 1, 2, 3, 4, 5, 6, 7, 8, 9}
(modulo 10, i.e., considering that 0 follows 9) is equal to 2.
$ a.out
Enter a first number at most equal to 1023: 145
Enter a second number at most equal to 1023: 89
Enter a third number at most equal to 1023: 11
The largest distance between two consecutive digits in one of the sets
     {0, 4, 7}
     {0, 3, 4, 6}
     {0, 1, 3}
(modulo 10, i.e., considering that 0 follows 9) is equal to 7.
$ a.out
Enter a first number at most equal to 1023: 28
Enter a second number at most equal to 1023: 124
Enter a third number at most equal to 1023: 926
The largest distance between two consecutive digits in one of the sets
     {2, 3, 4}
     {2, 3, 4, 5, 6}
     {1, 2, 3, 4, 7, 8, 9}
(modulo 10, i.e., considering that 0 follows 9) is equal to 8.
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$ a.out
Enter a first number at most equal to 1023: 520
Enter a second number at most equal to 1023: 530
Enter a third number at most equal to 1023: 540
The largest distance between two consecutive digits in one of the sets
    {3, 9}
    {1, 4, 9}
    {2, 3, 4, 9}
(modulo 10, i.e., considering that 0 follows 9) is equal to 6.
$ a.out
Enter a first number at most equal to 1023: 550
Enter a second number at most equal to 1023: 661
Enter a third number at most equal to 1023: 772
The largest distance between two consecutive digits in one of the sets
    {1, 2, 5, 9}
    {0, 2, 4, 7, 9}
    {2, 8, 9}
(modulo 10, i.e., considering that 0 follows 9) is equal to 6.
```