

TestCase 1:

Input

```
createOrder(1001, 1, 100, 4)
createOrder(1002, 2, 150, 7)
createOrder(1003, 8, 50, 2)
print(2, 15)
createOrder(1004, 9, 300, 12)
getRankOfOrder(1004)
print(45, 55)
createOrder(1005, 15, 400, 8)
createOrder(1006, 17, 100, 3)
cancelOrder(1005, 18)
getRankOfOrder(1004)
createOrder(1007, 19, 600, 7)
createOrder(1008, 25, 200, 8)
updateTime(1007, 27, 12)
getRankOfOrder(1006)
print(55, 85)
createOrder(1009, 36, 500, 15)
createOrder(1010, 40, 250, 10)
Quit()
```

Output:

```
Order 1001 has been created - ETA: 5
Order 1002 has been created - ETA: 16
Order 1003 has been created - ETA: 25
Order 1001 has been delivered at time 5
There are no orders in that time period
Order 1004 has been created - ETA: 35
Updated ETAs: [1003:49]
Order 1004 will be delivered after 1 orders.
[1003]
Order 1005 has been created - ETA: 59
Order 1006 has been created - ETA: 70
Order 1002 has been delivered at time 16
Order 1005 has been canceled
Updated ETAs: [1006: 54]
Order 1004 will be delivered after 0 orders.
Order 1007 has been created - ETA: 58
Updated ETAs: [1006:68]
Order 1008 has been created - ETA: 79
Updated ETAs: [1007:63,1006:78,1008:89]
Order 1006 will be delivered after 3 orders.
[1007,1006]
Order 1009 has been created - ETA: 112
Order 1004 has been delivered at time 35
Order 1010 has been created - ETA: 137
Order 1003 has been delivered at time 49
Order 1007 has been delivered at time 63
Order 1006 has been delivered at time 78
Order 1008 has been delivered at time 89
Order 1009 has been delivered at time 112
Order 1010 has been delivered at time 137
```

TestCase 2:

Input

```
createOrder(3001, 1, 200, 7)
createOrder(3002, 3, 250, 6)
createOrder(3003, 8, 1000, 3)
createOrder(3004, 13, 100, 5)
createOrder(3005, 15, 300, 4)
createOrder(3006, 17, 800, 2)
print(2, 20)
updateTime(3004, 20, 2)
print(5, 25)
cancelOrder(3005, 25)
print(10, 30)
createOrder(3007, 30, 200, 3)
getRankOfOrder(3005)
createOrder(3008, 33, 250, 6)
createOrder(3009, 38, 100, 3)
createOrder(3010, 40, 4000, 5)
getRankOfOrder(3008)
createOrder(3011, 45, 300, 4)
createOrder(3012, 47, 150, 2)
print(35, 50)
getRankOfOrder(3006)
Quit()
```

Output:

```
Order 3001 has been created - ETA: 8
Order 3002 has been created - ETA: 21
Order 3003 has been created - ETA: 18
Updated ETAs: [3002:27]
Order 3001 has been delivered at time 8
Order 3004 has been created - ETA: 38
Order 3005 has been created - ETA: 47
Order 3006 has been created - ETA: 35
Updated ETAs: [3004:42,3005:51]
[3003]
Updated ETAs: [3004:39,3005:45]
Order 3003 has been delivered at time 18
There are no orders in that time period
Order 3005 has been canceled
[3002]
Order 3007 has been created - ETA: 44
Order 3002 has been delivered at time 27
Order 3008 has been created - ETA: 53
Order 3009 has been created - ETA: 62
Order 3006 has been delivered at time 35
Order 3010 has been created - ETA: 46
Updated ETAs: [3007:54,3008:63,3009:72]
Order 3004 has been delivered at time 39
Order 3008 will be delivered after 2 orders.
Order 3011 has been created - ETA: 79
Order 3012 has been created - ETA: 85
Order 3010 has been delivered at time 46
There are no orders in that time period
```

```
Order 3007 has been delivered at time 54
Order 3008 has been delivered at time 63
Order 3009 has been delivered at time 72
Order 3011 has been delivered at time 79
Order 3012 has been delivered at time 85
```

TestCase 3:

Input

```
createOrder(4001, 1, 200, 3)
createOrder(4002, 3, 250, 6)
createOrder(4003, 8, 100, 3)
createOrder(4004, 13, 100, 5)
print(2, 15)
getRankOfOrder(4003)
updateTime(4003, 15, 2)
createOrder(4005, 17, 150, 4)
cancelOrder(4002, 20)
createOrder(4006, 22, 300, 3)
print(10, 25)
createOrder(4007, 25, 200, 2)
createOrder(4008, 28, 350, 5)
print(20, 30)
getRankOfOrder(4006)
createOrder(4009, 32, 250, 3)
cancelOrder(4004, 34)
updateTime(4005, 37, 5)
createOrder(4010, 40, 400, 6)
print(35, 45)
getRankOfOrder(4007)
createOrder(4011, 40, 200, 4)
createOrder(4012, 42, 300, 3)
print(50, 55)
updateTime(4010, 55, 7)
cancelOrder(4009, 56)
print(60, 90)
Quit()
```

Output:

Order 4001 has been created - ETA: 4
Order 4002 has been created - ETA: 13
Order 4003 has been created - ETA: 22
Order 4001 has been delivered at time 4
Order 4004 has been created - ETA: 30
Order 4002 has been delivered at time 13
There are no orders in that time period
Order 4003 will be delivered after 0 orders.
Updated ETAs: [4003:21,4004:28]
Order 4005 has been created - ETA: 37
Cannot cancel. Order 4002 has already been delivered.
Order 4006 has been created - ETA: 44
Order 4003 has been delivered at time 21
There are no orders in that time period
Order 4007 has been created - ETA: 49
Order 4008 has been created - ETA: 56
Order 4004 has been delivered at time 28
There are no orders in that time period
Order 4006 will be delivered after 1 orders.
Order 4009 has been created - ETA: 64
Cannot cancel. Order 4004 has already been delivered.
Cannot update. Order 4005 has already been delivered.
Order 4005 has been delivered at time 37
Order 4010 has been created - ETA: 73
[4006]
Order 4007 will be delivered after 1 orders.
Order 4011 has been created - ETA: 83
Order 4012 has been created - ETA: 90
There are no orders in that time period
Updated ETAs: [4010:74,4011:85,4012:92]
Order 4006 has been delivered at time 44
Order 4007 has been delivered at time 49
Order 4009 has been canceled
Updated ETAs: [4010: 68, 4011: 79, 4012: 86]
Order 4008 has been delivered at time 56
[4010,4011,4012]
Order 4010 has been delivered at time 68
Order 4011 has been delivered at time 79
Order 4012 has been delivered at time 86