**TEST CASE 1**

| **INPUT** | **OUTPUT** |
| --- | --- |
| **9**  **3** | **3** |

**TEST CASE 2**

| **INPUT** | **OUTPUT** |
| --- | --- |
| **15**  **5** | **3** |

**TEST CASE 3**

| **INPUT** | **OUTPUT** |
| --- | --- |
| **17**  **8** | **10** |

**TEST CASE 4**

| **INPUT** | **OUTPUT** |
| --- | --- |
| **16**  **13** | **8** |

**TEST CASE 5**

| **INPUT** | **OUTPUT** |
| --- | --- |
| **13**  **5** | **6** |

**TEST CASE 6**

| **INPUT** | **OUTPUT** |
| --- | --- |
| **21**  **19** | **12** |

**TEST CASE 7**

| **INPUT** | **OUTPUT** |
| --- | --- |
| **672675485**  **8656435** | **115** |

**TEST CASE 8**

| **INPUT** | **OUTPUT** |
| --- | --- |
| **6745**  **100000000** | **14863** |

**TEST CASE 9**

| **INPUT** | **OUTPUT** |
| --- | --- |
| **53653456**  **53653456** | **1** |

**TEST CASE 10**

| **INPUT** | **OUTPUT** |
| --- | --- |
| **2147483647**  **100000000** | **127** |