Predict the test results (two results must be discovered) of the instance;

“2-hour serum insulin: 500, Body mass index : 30, Age : 20” according to the following data set by using ?- Nearest Neighbour.

Firstly, Find the best K.

|  |  |  |  |
| --- | --- | --- | --- |
| **2-hour serum insulin** | **Body mass index** | **Age** | **Test result for diabetes** |
| 560 | 38 | 22 | Positive |
| 540 | 40 | 21 | Negative |
| 510 | 39 | 23 | Positive |
| 400 | 37 | 22 | Negative |
| 410 | 38 | 28 | Positive |
| 380 | 29 | 29 | Negative |
| 400 | 30 | 28 | Positive |
| 410 | 31 | 21 | Negative |
| 480 | 28 | 29 | Negative |
| 490 | 41 | 30 | Positive |

Use Min-Max Normalization (0-1) and Euclidean Distance metric.