```python
# Task-3
# College Event Feedback Analysis

from google.colab import files
uploaded=files. upload()
print(uploaded)
```

<IPython.core.display.HTML object>

Saving student dataset.csv to student dataset.csv
{'student dataset.csv': b',Student ID,Well versed with the
subject,Explains concepts in an understandable way,Use of
presentations,Degree of difficulty of assignments,Solves doubts
willingly,Structuring of the course,Provides support for students
going above and beyond,Course recommendation based on relevance\r\
n0,340,5,2,7,6,9,2,1,8\r\n1,253,6,5,8,6,2,1,2,9\r\
n2,680,7,7,6,5,4,2,3,1\r\n3,806,9,6,7,1,5,9,4,6\r\
n4,632,8,10,8,4,6,6,9,9\r\n5,832,7,2,7,8,3,5,1,4\r\
n6,772,9,3,5,2,10,3,8,1\r\n7,961,9,8,7,4,4,3,3,10\r\
n8,814,6,5,8,6,4,4,7,9\r\n9,863,5,9,4,7,9,4,4,5\r\
n10,576,10,3,8,6,6,3,6,9\r\n11,702,8,4,7,1,2,1,8,8\r\
n12,541,5,4,4,2,2,7,8,1\r\n13,552,5,6,7,2,7,4,4,2\r\
n14,510,6,7,8,3,4,7,7,6\r\n15,159,7,7,6,6,3,9,3,1\r\
n16,223,9,10,4,5,7,10,10,6\r\n17,807,8,3,4,2,2,4,6,1\r\
n18,525,9,9,4,3,5,5,9,2\r\n19,799,5,6,5,4,2,1,1,7\r\
n20,24,9,10,6,10,2,10,1,9\r\n21,509,8,2,7,5,2,3,4,4\r\
n22,797,9,10,4,10,9,2,10,7\r\n23,418,8,8,6,7,9,5,2,8\r\
n24,48,5,5,4,2,1,10,10,9\r\n25,657,9,5,7,3,2,8,10,6\r\
n26,864,9,8,5,2,3,9,2,8\r\n27,861,5,6,4,5,4,4,6,6\r\
n28,118,9,10,7,7,4,6,9,1\r\n29,387,7,3,8,1,6,8,6,8\r\
n30,282,5,6,7,3,8,1,1,9\r\n31,503,8,6,6,3,3,6,4,10\r\
n32,934,5,6,4,6,10,3,4,10\r\n33,781,8,3,4,5,1,8,10,5\r\
n34,898,10,10,4,3,5,4,2,1\r\n35,474,8,3,7,6,4,3,7,7\r\
n36,704,9,9,8,6,8,4,8,5\r\n37,977,9,5,4,4,6,3,1,9\r\
n38,454,9,6,6,1,10,8,10,7\r\n39,295,5,7,6,3,1,7,2,9\r\
n40,35,10,6,4,5,6,2,3,1\r\n41,304,9,9,4,6,5,1,7,2\r\
n42,56,6,9,6,8,9,6,2,4\r\n43,922,8,10,7,4,5,9,3,5\r\
n44,569,10,7,6,9,2,6,2,5\r\n45,186,6,4,4,4,6,9,10,10\r\
n46,258,7,2,7,2,7,2,6,10\r\n47,560,8,7,8,3,8,7,4,8\r\
n48,621,10,4,5,1,5,10,1,10\r\n49,568,10,7,4,6,10,8,10,8\r\
n50,393,6,9,8,7,5,8,1,4\r\n51,12,8,10,7,2,8,9,6,6\r\
n52,798,7,2,8,7,10,5,3,5\r\n53,740,8,10,7,3,2,10,10,1\r\
n54,184,10,9,8,6,4,8,8,9\r\n55,410,7,2,5,2,6,6,3,10\r\
n56,480,10,6,7,8,5,3,1,5\r\n57,84,7,4,6,10,7,7,8,9\r\
n58,89,9,9,4,5,1,2,3,9\r\n59,763,6,9,6,7,6,10,2,5\r\
n60,86,7,8,6,8,3,10,2,7\r\n61,867,6,4,6,4,2,7,5,3\r\
n62,248,6,6,4,6,6,6,2,3\r\n63,751,7,3,8,10,2,7,2,6\r\
n64,522,6,9,8,10,9,5,3,6\r\n65,696,5,5,4,9,3,1,8,6\r\
n66,274,8,2,4,7,10,8,5,8\r\n67,921,9,7,5,10,10,9,6,4\r\
n68,957,6,2,7,8,5,9,5,4\r\n69,88,9,4,4,9,9,9,7,10\r\

n70,149,5,6,5,1,8,9,7,8\r\n71,737,7,9,4,5,5,2,2,1\r\n72,891,7,2,4,9,6,9,7,9\r\n73,1,9,6,8,7,6,5,3,10\r\n74,868,7,9,7,2,6,2,9,4\r\n75,895,5,5,7,7,2,1,8,9\r\n76,638,9,10,8,2,1,1,4,8\r\n77,707,5,6,6,5,1,9,6,9\r\n78,432,9,9,6,8,2,3,2,4\r\n79,988,7,4,6,7,6,9,7,1\r\n80,742,7,7,8,2,1,1,8,1\r\n81,730,6,5,4,5,6,6,7,2\r\n82,321,5,7,6,2,3,5,3,5\r\n83,904,8,5,8,9,7,9,8,6\r\n84,171,6,10,4,6,1,6,2,3\r\n85,695,10,4,4,1,5,8,7,1\r\n86,498,8,5,4,5,10,7,1,10\r\n87,446,7,8,5,10,10,2,5,9\r\n88,982,9,10,7,5,6,6,1,5\r\n89,981,7,6,7,5,4,6,8,3\r\n90,849,6,10,6,7,7,4,10,7\r\n91,297,7,10,6,8,10,10,2,8\r\n92,713,8,6,7,5,2,7,10,8\r\n93,192,8,4,8,6,3,5,1,5\r\n94,561,9,6,4,8,6,8,3,3\r\n95,364,6,6,7,9,6,4,7,6\r\n96,40,6,7,5,6,10,5,6,3\r\n97,521,5,9,4,2,1,8,3,7\r\n98,201,8,2,8,9,8,8,9,4\r\n99,780,6,4,4,10,6,5,6,8\r\n100,853,7,9,4,8,9,4,10,2\r\n101,202,5,6,6,10,3,4,2,8\r\n102,421,6,3,8,10,6,8,7,9\r\n103,671,9,8,6,10,10,7,7,8\r\n104,334,5,9,4,3,8,10,4,2\r\n105,843,6,8,5,4,5,5,10,6\r\n106,57,10,7,6,10,4,4,2,4\r\n107,353,6,7,5,3,6,6,7,5\r\n108,681,7,2,7,5,2,1,3,7\r\n109,394,6,3,6,10,7,4,3,3\r\n110,188,7,6,8,9,9,8,9,10\r\n111,641,5,10,6,7,4,2,5,4\r\n112,544,10,7,8,4,6,5,7,8\r\n113,163,9,3,4,7,3,8,6,8\r\n114,283,9,2,6,1,2,10,5,5\r\n115,820,6,5,4,9,2,5,10,7\r\n116,254,6,6,6,8,9,4,4,8\r\n117,221,9,6,8,1,8,2,5,6\r\n118,736,8,2,8,8,2,6,5,4\r\n119,280,9,10,4,7,7,3,5,4\r\n120,976,5,2,5,5,7,9,4,3\r\n121,481,9,10,8,9,1,3,1,9\r\n122,80,7,6,4,1,5,6,1,8\r\n123,473,10,10,7,5,2,6,10,5\r\n124,762,10,7,5,7,8,9,3,4\r\n125,385,5,2,6,7,3,2,10,1\r\n126,195,9,7,5,5,10,10,5,1\r\n127,144,8,6,5,6,3,8,2,6\r\n128,767,10,10,8,3,9,6,4,8\r\n129,300,6,8,4,5,5,9,5,4\r\n130,580,5,2,5,8,6,5,4,9\r\n131,216,5,9,8,2,4,8,9,10\r\n132,583,9,3,4,6,5,3,8,7\r\n133,881,7,9,5,9,4,5,4,8\r\n134,488,8,8,6,9,7,4,6,1\r\n135,892,5,8,8,9,6,9,10,6\r\n136,152,7,2,5,1,5,10,5,6\r\n137,925,7,10,6,7,9,10,1,3\r\n138,729,9,9,8,7,5,4,5,5\r\n139,647,5,5,8,8,9,6,9,8\r\n140,686,8,6,5,5,2,6,5,8\r\n141,93,9,10,6,4,9,6,7,8\r\n142,485,8,4,7,1,4,7,1,4\r\n143,59,5,8,5,6,10,3,4,10\r\n144,907,10,4,7,6,1,2,5,1\r\n145,158,10,6,5,6,2,10,3,8\r\n146,955,10,4,4,1,10,1,10,10\r\n147,758,8,3,7,7,9,6,7,5\r\n148,605,6,4,4,4,7,5,5,2\r\n149,475,10,6,4,9,3,1,6,7\r\n150,154,9,7,4,8,2,6,3,9\r\n151,79,6,4,6,6,6,4,9,10\r\n152,36,10,6,5,2,1,9,9,6\r\n153,562,6,3,6,7,8,7,4,1\r\n154,231,10,7,8,1,3,3,3,3\r\n155,869,8,7,6,2,9,4,1,7\r\n156,608,7,4,6,5,4,7,8,7\r\n157,846,10,7,7,4,7,10,7,1\r\n158,542,10,4,7,7,2,2,5,9\r\n159,941,9,3,7,2,9,7,3,1\r\n160,919,10,2,8,5,6,3,8,5\r\n161,352,6,2,6,3,5,3,8,6\r\n162,839,9,2,5,10,4,4,9,1\r\n163,266,8,8,5,6,6,8,2,2\r\n164,298,8,4,8,9,7,1,7,3\r\n165,929,10,2,6,1,1,9,9,7\r\n166,574,6,4,8,5,9,5,7,10\r\n167,250,5,7,7,3,1,6,3,1\r\

n168,616,9,8,6,9,6,3,5,8\r\n169,164,8,5,7,10,8,9,10,1\r\n170,827,6,3,4,9,7,8,7,6\r\n171,228,7,6,6,1,6,6,6,9\r\n172,787,10,10,5,10,1,9,3,8\r\n173,317,8,8,4,1,10,10,9,1\r\n174,110,9,6,4,1,4,7,9,5\r\n175,165,6,2,6,2,2,10,2,2\r\n176,701,5,9,7,1,9,9,1,9\r\n177,362,7,9,6,7,4,8,1,2\r\n178,890,8,7,5,3,9,1,4,5\r\n179,728,10,9,4,8,5,2,3,10\r\n180,466,9,8,5,5,6,2,10,4\r\n181,709,9,3,6,4,4,8,10,1\r\n182,482,10,3,4,3,10,1,8,5\r\n183,406,9,10,6,1,6,1,9,2\r\n184,66,8,5,8,7,6,1,9,9\r\n185,862,6,5,6,5,7,2,10,8\r\n186,61,9,8,6,5,3,10,6,6\r\n187,111,7,9,7,1,10,10,3,10\r\n188,147,6,8,4,6,9,6,8,7\r\n189,211,7,4,4,3,7,8,7,10\r\n190,996,6,5,6,10,8,7,8,4\r\n191,459,8,5,8,6,6,1,8,4\r\n192,81,5,5,6,5,7,3,9,5\r\n193,288,5,9,6,9,4,4,2,6\r\n194,6,7,10,8,3,3,4,1,2\r\n195,547,6,6,8,5,1,2,2,8\r\n196,30,6,2,7,5,1,10,9,10\r\n197,445,9,4,4,2,4,8,1,6\r\n198,591,6,9,8,5,10,6,2,10\r\n199,770,10,10,5,7,10,7,7,10\r\n200,484,9,6,8,10,3,2,8,4\r\n201,180,8,4,4,1,6,9,6,1\r\n202,946,5,5,5,6,1,3,10,5\r\n203,901,9,8,6,1,2,9,8,2\r\n204,517,10,5,7,7,5,10,6,5\r\n205,545,9,4,8,1,8,6,2,4\r\n206,918,8,3,8,9,9,1,6,1\r\n207,652,8,3,4,8,3,2,2,3\r\n208,471,10,10,4,8,2,2,4,7\r\n209,323,6,8,7,5,4,1,9,3\r\n210,276,8,5,7,9,1,10,1,2\r\n211,672,7,8,5,6,5,10,5,10\r\n212,337,10,7,6,8,9,5,1,1\r\n213,468,7,7,8,4,2,1,5,10\r\n214,380,8,8,4,8,2,4,9,2\r\n215,755,9,8,7,2,9,6,3,7\r\n216,267,8,9,4,4,8,4,8,1\r\n217,598,9,3,4,9,3,4,5,1\r\n218,128,6,2,6,1,9,3,9,2\r\n219,444,8,2,6,10,7,2,4,8\r\n220,572,6,5,4,4,8,6,8,9\r\n221,319,8,3,6,6,7,10,8,4\r\n222,390,8,6,7,5,1,4,3,9\r\n223,176,10,2,6,7,4,10,1,3\r\n224,883,7,4,4,2,8,6,7,4\r\n225,831,5,2,8,3,5,10,7,7\r\n226,220,10,5,8,7,9,7,2,7\r\n227,17,7,6,5,3,9,5,5,2\r\n228,938,10,10,6,5,2,9,9,9\r\n229,651,8,7,6,3,9,10,6,1\r\n230,953,5,10,8,10,6,4,6,4\r\n231,902,5,8,6,10,4,5,5,9\r\n232,167,7,7,5,8,6,9,9,8\r\n233,669,9,3,4,5,2,2,1,6\r\n234,859,8,3,5,9,10,3,1,6\r\n235,120,8,4,7,5,4,4,10,6\r\n236,293,10,4,7,1,6,7,7,4\r\n237,789,10,2,8,7,9,8,1,4\r\n238,182,5,2,7,2,3,6,1,9\r\n239,369,10,5,4,4,3,7,4,10\r\n240,207,6,8,6,7,9,7,2,5\r\n241,842,10,7,5,3,3,6,4,6\r\n242,38,5,8,7,6,10,8,9,5\r\n243,495,5,4,7,9,6,10,5,9\r\n244,942,10,6,8,3,7,8,4,5\r\n245,752,10,7,4,4,4,9,10,7\r\n246,940,7,3,6,9,10,8,3,5\r\n247,648,5,7,7,9,6,3,10,3\r\n248,125,6,2,4,5,9,7,7,7\r\n249,516,10,2,8,9,2,3,3,1\r\n250,963,9,6,4,5,3,3,6,6\r\n251,215,5,6,6,2,1,9,5,8\r\n252,823,7,5,8,3,4,3,1,10\r\n253,840,5,7,5,6,9,9,10,6\r\n254,429,8,3,5,1,8,1,8,9\r\n255,109,6,3,5,6,1,6,6,10\r\n256,795,6,9,8,4,2,6,10,6\r\n257,760,9,4,4,3,8,5,10,1\r\n258,536,10,10,4,7,8,7,6,2\r\n259,888,6,6,5,2,3,6,6,3\r\n260,719,10,10,8,7,6,10,6,4\r\n261,654,6,4,4,9,5,8,8,2\r\n262,947,7,3,8,1,5,9,7,2\r\n263,403,5,7,6,6,5,6,4,6\r\n264,124,9,9,7,9,1,9,4,3\r\n265,548,9,8,6,7,1,2,7,6\r\

n266,880,7,3,6,3,5,3,3,10\r\n267,939,10,10,7,4,1,2,3,9\r\
n268,166,6,10,4,4,4,8,4,6\r\n269,885,5,6,7,7,2,2,5,7\r\
n270,112,7,9,6,9,1,7,1,2\r\n271,811,8,8,8,6,1,4,9,1\r\
n272,213,10,8,4,10,1,5,6,2\r\n273,375,10,4,4,1,3,4,7,9\r\
n274,897,6,7,4,1,9,8,8,7\r\n275,460,7,8,5,6,7,7,6,7\r\
n276,416,6,2,5,8,9,6,3,7\r\n277,571,8,9,7,3,1,8,9,7\r\
n278,744,8,5,7,3,10,4,6,7\r\n279,378,9,8,7,2,4,7,2,6\r\
n280,121,5,9,5,2,4,5,6,6\r\n281,462,10,4,8,5,4,6,4,7\r\
n282,777,8,6,4,6,4,7,10,1\r\n283,845,5,10,6,8,4,4,4,5\r\
n284,533,6,10,5,7,2,5,10,10\r\n285,450,5,2,6,2,4,5,1,4\r\
n286,717,6,2,4,6,6,2,6,9\r\n287,469,10,8,6,1,3,5,8,10\r\
n288,670,7,7,8,1,6,1,2,1\r\n289,137,8,2,5,2,4,9,7,8\r\
n290,801,10,7,4,3,6,1,10,4\r\n291,315,5,10,5,10,8,4,8,4\r\
n292,153,7,7,5,3,8,9,8,9\r\n293,190,8,6,7,5,6,4,3,8\r\
n294,22,7,9,4,1,2,8,10,4\r\n295,949,9,8,7,1,7,6,9,4\r\
n296,523,10,2,6,9,7,5,10,9\r\n297,527,5,6,5,2,8,6,9,8\r\
n298,461,7,10,7,6,6,8,4,9\r\n299,244,5,8,4,9,3,10,1,3\r\
n300,363,9,3,8,10,2,7,5,1\r\n301,610,8,10,6,8,2,1,5,1\r\
n302,381,9,2,8,8,1,9,1,2\r\n303,954,8,8,6,3,9,5,7,2\r\
n304,604,10,9,8,9,4,8,7,9\r\n305,414,10,6,4,8,2,9,9,3\r\
n306,151,8,7,5,10,8,3,8,6\r\n307,721,6,9,4,1,4,10,10,9\r\
n308,664,10,8,7,4,8,2,1,10\r\n309,956,7,2,6,5,2,3,8,7\r\
n310,747,5,3,5,6,5,10,3,6\r\n311,438,9,6,5,9,2,3,9,3\r\
n312,975,5,10,4,8,7,6,8,3\r\n313,277,5,6,8,7,2,7,1,10\r\
n314,312,7,2,7,6,6,3,7,2\r\n315,565,10,9,7,10,4,8,5,4\r\
n316,739,8,7,5,10,1,1,8,1\r\n317,584,8,8,5,8,6,6,9,4\r\
n318,894,6,3,5,4,7,1,5,5\r\n319,270,9,10,5,9,6,4,7,7\r\
n320,966,7,4,5,3,1,8,10,2\r\n321,489,7,2,5,8,1,1,8,8\r\
n322,665,6,3,4,2,8,5,8,5\r\n323,71,9,10,8,4,9,3,8,2\r\
n324,603,7,2,7,1,7,7,1,7\r\n325,196,8,10,8,10,6,7,7,7\r\
n326,804,9,3,7,6,10,7,9,7\r\n327,837,5,10,4,1,4,8,9,1\r\
n328,530,6,5,4,9,1,2,3,6\r\n329,720,6,6,6,9,10,4,6,7\r\
n330,272,5,4,6,4,4,7,7,9\r\n331,984,5,10,6,4,2,10,4,6\r\
n332,185,10,3,8,4,1,10,7,9\r\n333,487,6,6,4,2,10,10,1,9\r\
n334,75,8,9,8,6,2,7,9,10\r\n335,718,6,3,6,7,6,6,2,6\r\
n336,496,10,7,4,6,10,5,3,6\r\n337,630,5,5,4,8,3,6,6,8\r\
n338,637,8,10,5,6,10,8,2,2\r\n339,360,9,9,8,2,3,1,8,6\r\
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n364,457,7,4,8,2,3,6,8,4\r\n365,148,5,4,4,4,8,10,5,5\r\n366,958,10,10,5,8,5,10,7,8\r\n367,356,7,3,7,6,4,2,1,10\r\n368,793,10,9,6,4,7,6,8,3\r\n369,771,8,7,6,4,8,7,3,2\r\n370,452,5,6,7,9,7,8,6,1\r\n371,72,8,7,7,3,4,1,4,7\r\n372,710,7,2,6,5,7,7,6,10\r\n373,980,6,3,7,1,5,4,9,4\r\n374,145,6,8,4,6,1,3,2,7\r\n375,960,6,9,6,1,3,3,5,8\r\n376,660,5,7,7,3,10,3,3,4\r\n377,987,9,10,7,8,7,3,8,7\r\n378,534,9,5,7,5,2,6,10,8\r\n379,858,9,5,5,3,2,2,7,7\r\n380,324,10,5,5,2,2,5,7,6\r\n381,884,7,4,7,10,5,1,7,4\r\n382,611,8,9,5,3,9,5,8,3\r\n383,136,8,6,7,10,9,9,2,3\r\n384,705,9,3,6,3,3,5,1,2\r\n385,991,7,4,5,8,9,8,5,1\r\n386,676,9,8,5,7,4,10,2,6\r\n387,769,9,8,8,8,1,1,8,5\r\n388,246,7,10,8,8,4,10,3,8\r\n389,644,9,6,8,2,7,6,4,6\r\n390,263,7,9,4,7,9,8,10,7\r\n391,476,9,4,6,4,8,6,4,10\r\n392,697,7,7,6,1,8,10,5,2\r\n393,95,7,2,5,5,9,6,8,3\r\n394,688,8,6,7,5,6,1,4,10\r\n395,633,8,2,4,7,4,6,7,4\r\n396,241,8,3,8,8,10,1,8,6\r\n397,524,9,8,4,6,10,1,9,10\r\n398,504,9,4,5,6,6,1,7,10\r\n399,417,9,6,7,9,5,1,7,2\r\n400,554,6,6,8,2,4,6,4,10\r\n401,656,6,2,7,2,5,6,9,9\r\n402,19,10,4,6,3,9,10,9,3\r\n403,275,8,5,4,9,5,5,8,10\r\n404,478,5,10,7,6,8,7,3,9\r\n405,132,6,9,5,8,10,3,2,10\r\n406,515,8,3,5,10,3,4,9,4\r\n407,44,8,9,5,3,6,9,4,9\r\n408,388,6,10,4,5,6,4,4,9\r\n409,204,8,7,6,3,3,10,3,6\r\n410,338,5,2,4,6,9,10,9,4\r\n411,619,8,7,6,4,3,9,3,8\r\n412,205,8,4,4,2,1,7,9,7\r\n413,39,7,3,7,10,6,4,8,2\r\n414,53,5,8,5,1,10,8,5,7\r\n415,58,9,3,7,1,2,3,10,7\r\n416,157,9,6,8,2,8,4,4,3\r\n417,28,8,6,6,9,9,9,4,7\r\n418,833,8,6,7,7,7,9,10,9\r\n419,252,8,9,4,6,10,2,7,5\r\n420,658,8,5,6,7,10,4,6,4\r\n421,179,6,3,7,6,2,6,5,2\r\n422,851,9,6,4,10,2,1,3,10\r\n423,809,7,8,7,5,10,2,8,8\r\n424,330,7,7,5,7,9,10,2,2\r\n425,94,10,10,4,7,8,2,4,4\r\n426,826,10,5,7,2,8,7,10,5\r\n427,227,9,3,6,4,7,4,4,7\r\n428,1000,9,8,5,4,10,7,7,10\r\n429,114,10,9,7,1,8,4,4,2\r\n430,251,5,9,6,9,6,4,5,2\r\n431,613,5,6,6,3,9,4,2,9\r\n432,101,10,5,6,6,9,8,10,3\r\n433,871,7,8,7,10,10,7,2,2\r\n434,551,6,3,5,7,3,1,9,10\r\n435,931,6,5,7,3,6,5,6,10\r\n436,49,8,7,8,8,1,1,8,3\r\n437,512,5,10,7,9,9,9,6,9\r\n438,261,9,9,7,7,4,10,5,9\r\n439,754,6,9,4,4,3,10,2,10\r\n440,345,8,2,8,9,10,10,9,5\r\n441,970,10,9,5,7,6,7,4,7\r\n442,990,6,9,6,4,9,5,10,8\r\n443,911,6,4,4,10,9,4,7,2\r\n444,909,9,8,5,9,5,6,9,7\r\n445,817,6,5,7,10,10,4,6,6\r\n446,733,10,10,5,1,4,1,3,4\r\n447,626,7,9,5,4,9,4,3,1\r\n448,292,7,9,8,1,5,4,7,4\r\n449,82,5,10,8,4,4,10,5,5\r\n450,355,10,8,5,6,5,10,1,8\r\n451,948,9,5,4,7,9,3,5,7\r\n452,341,9,4,4,4,7,5,5,8\r\n453,952,7,9,5,7,8,8,10,5\r\n454,711,7,3,4,6,3,7,6,4\r\n455,635,7,3,8,6,7,4,10,5\r\n456,850,5,8,7,4,8,7,8,6\r\n457,716,6,3,7,9,2,3,3,6\r\n458,627,10,2,4,1,6,5,9,5\r\n459,661,6,10,4,3,8,2,7,6\r\n460,877,8,9,4,5,10,10,10,2\r\n461,177,8,2,6,2,8,1,9,9\r\n

n462,322,8,10,7,3,3,3,1,5\r\n463,914,9,2,4,2,4,2,2,9\r\n464,486,10,9,5,1,4,10,6,9\r\n465,723,6,10,5,3,10,3,6,4\r\n466,105,9,10,5,1,3,1,1,2\r\n467,52,6,10,4,1,7,3,10,2\r\n468,436,9,9,4,10,1,10,10,2\r\n469,829,6,9,5,3,2,2,10,9\r\n470,753,5,10,8,7,5,10,9,7\r\n471,130,7,9,5,9,3,2,5,4\r\n472,91,6,5,4,2,5,8,3,3\r\n473,590,10,3,4,4,9,9,6,2\r\n474,965,10,3,4,5,10,3,7,3\r\n475,99,8,9,6,2,2,3,10,6\r\n476,912,7,10,7,10,2,7,5,7\r\n477,395,9,6,8,2,7,9,8,10\r\n478,923,6,3,5,6,9,4,10,3\r\n479,499,7,9,8,3,5,1,5,2\r\n480,115,5,5,7,1,3,8,1,10\r\n481,815,5,9,6,6,2,9,5,3\r\n482,570,10,10,6,8,9,2,8,10\r\n483,825,9,7,8,1,3,2,9,3\r\n484,620,9,5,8,2,8,10,8,8\r\n485,175,10,9,8,2,1,6,7,2\r\n486,358,5,7,4,3,3,10,3,4\r\n487,191,7,4,5,2,5,10,4,7\r\n488,492,6,5,8,10,3,8,3,2\r\n489,529,9,6,6,1,4,10,1,7\r\n490,389,5,5,8,6,2,3,5,7\r\n491,878,6,5,8,4,10,3,9,10\r\n492,368,7,9,8,3,2,7,4,1\r\n493,122,7,5,5,3,9,6,9,2\r\n494,332,9,2,7,2,8,7,4,10\r\n495,303,7,4,5,4,7,2,1,6\r\n496,336,8,10,4,5,6,7,2,3\r\n497,588,6,6,4,10,10,10,3,9\r\n498,609,10,9,4,4,1,5,9,10\r\n499,920,10,6,7,10,10,2,4,2\r\n500,370,9,4,7,10,1,10,2,7\r\n501,405,10,2,5,5,5,1,4,6\r\n502,779,10,8,6,3,8,8,7,8\r\n503,962,10,6,4,5,1,7,1,10\r\n504,268,10,6,5,9,9,1,8,6\r\n505,625,10,7,6,7,9,6,3,3\r\n506,217,8,9,8,3,8,5,5,5\r\n507,479,10,10,4,6,5,9,2,3\r\n508,500,9,5,8,4,2,2,5,1\r\n509,409,8,9,7,3,10,4,6,1\r\n510,546,7,7,5,1,9,8,1,1\r\n511,967,5,5,8,8,1,9,8,5\r\n512,343,8,4,7,1,10,8,2,6\r\n513,639,7,4,7,7,6,10,5,7\r\n514,402,6,8,6,9,4,8,5,7\r\n515,617,5,7,5,4,7,1,10,6\r\n516,349,6,8,8,2,9,9,2,8\r\n517,994,8,5,5,2,5,5,9,5\r\n518,279,5,10,7,1,4,4,9,4\r\n519,926,10,7,5,1,1,6,6,1\r\n520,816,10,8,5,9,2,7,9,3\r\n521,765,8,7,8,5,7,7,7,7\r\n522,160,10,6,5,4,2,10,4,7\r\n523,606,8,3,8,1,6,4,8,9\r\n524,602,5,3,6,2,8,10,3,1\r\n525,893,10,6,8,1,1,10,1,3\r\n526,810,9,6,7,3,5,9,10,5\r\n527,802,8,2,6,6,3,8,7,7\r\n528,162,6,2,5,2,10,2,8,8\r\n529,449,5,7,8,9,3,2,7,10\r\n530,463,7,8,7,8,1,4,4,1\r\n531,41,5,3,5,9,3,1,8,8\r\n532,838,6,3,6,8,7,1,8,8\r\n533,703,10,7,8,3,4,7,9,8\r\n534,490,9,2,6,10,9,8,2,4\r\n535,906,7,7,8,4,5,2,4,5\r\n536,174,7,3,6,7,10,10,2,3\r\n537,4,5,8,5,7,10,7,3,1\r\n538,161,6,7,8,3,5,10,6,4\r\n539,31,5,4,5,9,9,2,4,1\r\n540,623,6,4,6,6,10,10,3,9\r\n541,818,10,5,4,9,2,6,2,6\r\n542,60,5,6,5,3,1,7,5,3\r\n543,384,6,2,7,9,4,4,2,8\r\n544,971,7,6,7,4,6,6,7,9\r\n545,427,7,3,7,2,9,8,8,7\r\n546,431,10,9,4,3,3,9,4,1\r\n547,408,6,5,4,7,1,8,6,7\r\n548,577,10,7,4,10,7,2,5,1\r\n549,803,6,10,8,5,6,5,6,7\r\n550,273,9,3,7,1,5,3,8,4\r\n551,371,6,3,4,9,4,10,4,10\r\n552,999,6,7,8,8,9,9,9,5\r\n553,595,10,5,5,4,10,4,4,4\r\n554,63,8,8,7,4,4,4,8,2\r\n555,899,5,4,7,7,2,6,1,1\r\n556,0,7,4,8,2,1,4,8,3\r\n557,796,7,9,6,2,7,7,6,8\r\n558,181,10,10,4,2,1,5,3,1\r\n559,290,6,7,6,4,2,8,9,7\r\

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n576,508,10,6,5,8,8,5,7,10\r\n577,989,8,4,5,4,8,6,7,3\r\
n578,133,10,4,7,3,5,4,4,5\r\n579,15,8,9,8,3,6,10,2,3\r\
n580,78,10,9,6,8,10,7,7,8\r\n581,433,6,6,8,4,8,9,4,1\r\
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n584,197,9,3,5,9,8,2,4,10\r\n585,483,8,2,6,2,10,2,2,5\r\
n586,376,5,5,5,8,8,4,6,10\r\n587,915,10,7,4,6,9,4,9,5\r\
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n590,425,5,9,8,1,10,8,10,10\r\n591,668,6,3,6,1,2,10,9,3\r\
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n600,14,5,5,8,9,7,5,2,1\r\n601,172,6,5,8,3,4,3,10,3\r\
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n606,662,10,6,4,5,1,9,6,3\r\n607,513,9,10,7,7,9,2,10,1\r\
n608,722,7,10,5,5,4,9,6,7\r\n609,8,6,7,6,10,6,9,9,10\r\
n610,873,10,10,4,5,9,10,2,5\r\n611,684,10,3,7,4,4,5,1,10\r\
n612,73,7,2,5,6,3,1,1,4\r\n613,900,9,8,5,8,4,6,9,7\r\
n614,933,6,9,4,8,7,10,3,5\r\n615,634,6,7,6,6,1,6,3,8\r\
n616,835,8,2,7,8,3,4,3,4\r\n617,422,9,8,4,4,8,3,4,10\r\
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n624,64,6,2,8,1,8,4,8,4\r\n625,860,10,8,4,3,7,1,4,5\r\
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n628,32,9,3,7,7,6,1,9,2\r\n629,296,10,7,4,2,2,10,10,8\r\
n630,419,10,2,5,8,5,3,3,10\r\n631,83,10,6,6,1,8,1,3,9\r\
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n638,299,10,8,5,5,4,3,1,9\r\n639,107,9,4,8,6,10,4,5,9\r\
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n644,281,5,6,6,3,4,1,1,1\r\n645,836,9,3,4,6,6,3,2,7\r\
n646,426,9,8,7,8,10,6,9,8\r\n647,42,8,2,4,6,6,7,3,1\r\
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n652,556,9,9,5,5,1,3,6,10\r\n653,3,9,6,5,9,10,5,5,4\r\
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n670,50,9,8,6,7,1,6,7,4\r\n671,423,7,9,5,10,10,7,7,3\r\
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n676,493,9,4,4,9,4,3,6,7\r\n677,553,7,2,4,7,3,5,1,3\r\
n678,27,7,3,5,5,5,1,8,6\r\n679,257,8,5,6,4,4,1,5,4\r\
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n682,37,8,9,5,3,4,3,5,2\r\n683,170,5,10,7,2,8,5,9,5\r\
n684,528,9,2,5,2,6,5,1,6\r\n685,600,7,8,6,10,6,7,7,6\r\
n686,655,7,8,5,4,1,6,6,8\r\n687,74,8,8,6,1,2,5,2,6\r\
n688,505,9,6,8,5,8,4,7,6\r\n689,377,5,5,7,3,9,6,1,4\r\
n690,808,8,6,4,5,1,8,8,3\r\n691,366,9,9,8,2,1,10,5,2\r\
n692,238,8,7,5,10,10,9,7,10\r\n693,255,9,10,7,10,3,2,7,8\r\
n694,123,10,2,4,5,9,8,3,5\r\n695,663,6,2,8,2,5,7,5,7\r\
n696,876,6,7,4,4,9,2,5,9\r\n697,690,5,10,8,4,2,7,9,6\r\
n698,309,5,8,4,9,2,1,4,5\r\n699,693,7,9,8,1,5,10,3,7\r\
n700,226,7,6,8,8,8,5,8,8\r\n701,951,10,10,7,10,5,9,7,1\r\
n702,260,9,3,7,4,7,2,8,3\r\n703,243,9,8,8,8,4,10,8,9\r\
n704,222,5,4,4,2,7,9,5,3\r\n705,314,5,10,6,8,6,6,10,4\r\
n706,229,7,6,8,2,2,10,8,8\r\n707,85,5,6,8,9,3,4,4,4\r\
n708,76,8,9,8,6,3,10,7,2\r\n709,887,6,9,5,8,9,7,6,2\r\
n710,582,8,4,7,8,1,5,9,3\r\n711,674,8,5,6,8,7,10,2,7\r\
n712,986,7,2,6,2,4,7,10,7\r\n713,511,8,4,4,5,2,10,10,6\r\
n714,879,6,10,5,10,9,5,5,4\r\n715,401,8,10,7,2,8,10,8,9\r\
n716,514,6,6,7,10,7,7,6,3\r\n717,750,10,3,8,1,5,1,3,5\r\
n718,156,7,4,7,9,10,8,5,8\r\n719,775,5,6,7,2,5,4,1,4\r\
n720,329,9,8,8,5,3,3,10,8\r\n721,467,8,10,5,7,7,1,3,6\r\
n722,178,7,7,4,7,1,2,1,2\r\n723,549,5,3,7,6,8,8,5,5\r\
n724,453,8,4,4,4,2,8,1,4\r\n725,307,6,9,5,1,6,5,3,5\r\
n726,472,6,8,7,7,9,9,2,3\r\n727,392,7,7,4,9,7,10,8,4\r\
n728,65,6,4,4,6,3,10,8,3\r\n729,575,9,4,7,7,1,1,5,1\r\
n730,855,8,3,6,4,1,1,9,7\r\n731,791,5,9,4,4,1,4,10,9\r\
n732,391,5,3,7,6,7,6,9,4\r\n733,973,6,3,4,6,4,6,6,9\r\
n734,828,8,3,5,2,9,5,6,3\r\n735,247,6,9,6,5,2,2,3,7\r\
n736,412,9,2,5,8,7,2,10,4\r\n737,67,7,9,4,3,9,1,1,2\r\
n738,289,5,2,5,8,9,2,7,2\r\n739,399,10,6,4,8,6,5,10,4\r\
n740,138,8,5,8,8,10,4,2,6\r\n741,537,10,6,4,9,9,5,7,5\r\
n742,265,5,9,7,6,5,6,5,3\r\n743,724,5,2,6,1,7,3,3,1\r\
n744,653,5,6,5,6,6,3,9,2\r\n745,318,6,8,5,10,6,7,10,8\r\
n746,232,6,8,5,5,1,1,7,8\r\n747,21,9,7,5,3,6,6,1,6\r\
n748,998,9,7,5,1,2,2,1,10\r\n749,694,9,8,8,10,7,7,7,2\r\
n750,927,6,2,6,2,10,3,6,4\r\n751,348,7,9,5,6,5,5,8,6\r\
n752,968,6,7,6,3,8,1,9,3\r\n753,992,10,6,4,3,8,6,10,3\r\
n754,764,9,3,7,6,3,8,10,2\r\n755,587,5,4,8,2,2,2,4,10\r\

n756,944,10,8,6,8,8,7,9,6\r\n757,239,5,10,4,3,2,7,4,4\r\
n758,886,7,7,5,5,10,1,9,9\r\n759,23,9,7,4,2,1,2,9,3\r\
n760,458,6,2,4,6,6,10,4,1\r\n761,822,6,2,7,1,5,4,1,10\r\
n762,413,7,10,4,2,3,1,10,1\r\n763,563,7,4,8,8,7,3,3,10\r\
n764,331,8,8,7,5,10,4,7,5\r\n765,434,7,7,7,6,1,8,9,6\r\
n766,456,10,4,8,6,5,1,10,1\r\n767,430,9,6,4,9,8,6,4,3\r\
n768,896,6,8,7,5,4,4,5,5\r\n769,451,9,3,6,10,7,8,9,10\r\
n770,477,5,2,5,6,10,6,10,8\r\n771,9,7,5,4,5,1,3,5,6\r\
n772,325,7,5,7,6,1,5,8,6\r\n773,812,9,5,4,4,2,4,2,6\r\
n774,727,7,2,6,4,2,10,9,5\r\n775,928,6,7,6,9,4,8,5,8\r\
n776,134,9,9,7,4,7,10,8,3\r\n777,819,6,7,8,8,9,10,2,2\r\
n778,230,7,2,8,2,6,1,9,2\r\n779,520,9,3,5,6,7,10,10,3\r\
n780,326,7,10,8,8,6,4,9,7\r\n781,142,6,8,4,10,8,5,8,6\r\
n782,491,5,4,8,6,1,3,4,4\r\n783,379,7,5,6,2,9,7,3,10\r\
n784,465,5,2,8,8,6,8,2,4\r\n785,756,6,7,7,3,2,6,9,7\r\
n786,347,6,8,7,3,5,1,2,8\r\n787,237,10,4,5,8,7,8,2,8\r\
n788,642,5,7,6,8,9,6,6,7\r\n789,506,9,7,4,1,5,7,5,1\r\
n790,646,7,8,5,4,7,8,8,8\r\n791,382,10,10,7,5,2,3,6,3\r\
n792,256,6,7,4,5,9,8,6,5\r\n793,327,8,8,5,10,2,1,10,5\r\
n794,624,7,3,7,10,2,1,8,8\r\n795,155,8,8,8,10,3,9,7,3\r\
n796,578,8,10,7,4,5,8,7,6\r\n797,640,10,9,4,10,2,4,3,1\r\
n798,997,9,8,8,6,8,3,3,10\r\n799,242,7,9,5,4,5,9,1,4\r\
n800,344,7,6,8,9,8,3,8,5\r\n801,699,9,5,4,8,4,2,2,8\r\
n802,77,9,4,5,9,2,1,5,10\r\n803,821,8,9,5,5,8,9,4,9\r\
n804,903,9,8,8,8,4,8,4,1\r\n805,540,9,10,7,3,2,4,4,5\r\
n806,596,5,8,7,7,1,2,10,3\r\n807,169,8,2,6,3,3,6,9,3\r\
n808,526,9,5,5,5,2,6,4,9\r\n809,361,7,2,6,4,5,7,8,3\r\
n810,917,8,6,5,3,7,5,4,8\r\n811,342,5,9,8,1,9,8,7,10\r\
n812,599,5,2,4,8,4,8,9,5\r\n813,875,5,4,7,3,5,6,4,5\r\
n814,745,5,9,5,10,8,2,9,1\r\n815,131,9,4,8,2,7,5,2,10\r\
n816,143,6,6,7,8,10,3,3,9\r\n817,666,10,5,6,8,1,2,7,7\r\
n818,104,8,5,4,2,7,9,4,4\r\n819,964,8,5,5,3,10,5,5,3\r\
n820,208,8,7,5,7,2,3,2,8\r\n821,774,7,10,5,4,6,10,9,6\r\
n822,346,10,7,4,9,3,2,10,8\r\n823,97,7,8,7,9,6,3,10,7\r\
n824,306,9,10,4,1,3,3,2,5\r\n825,18,9,6,6,1,5,8,4,10\r\
n826,284,5,7,6,3,10,3,8,6\r\n827,173,5,7,5,10,10,10,3,10\r\
n828,558,7,9,5,5,9,7,3,5\r\n829,51,7,2,6,2,8,2,10,2\r\
n830,357,5,8,7,5,4,1,8,8\r\n831,692,8,8,6,9,5,8,7,10\r\
n832,26,8,2,6,10,9,9,4,5\r\n833,386,9,5,5,4,6,5,7,7\r\
n834,287,5,9,5,5,10,8,4,10\r\n835,974,8,10,4,2,4,9,8,7\r\
n836,683,6,9,4,8,5,5,1,10\r\n837,374,6,9,4,6,2,6,7,8\r\
n838,278,10,8,7,8,6,7,8,1\r\n839,367,10,4,8,3,3,9,5,7\r\
n840,800,7,4,5,2,1,6,3,9\r\n841,11,9,5,6,8,5,6,7,7\r\
n842,310,5,8,5,9,4,4,9,10\r\n843,910,5,8,7,10,8,2,4,8\r\
n844,440,5,7,8,9,7,1,8,10\r\n845,441,7,8,5,3,1,8,6,8\r\
n846,146,8,7,5,6,9,2,9,10\r\n847,614,8,2,6,7,8,6,6,5\r\
n848,262,10,5,4,9,6,9,9,3\r\n849,34,9,7,8,9,8,2,8,9\r\
n850,407,9,8,8,6,2,9,6,4\r\n851,564,5,10,5,6,8,5,3,1\r\
n852,538,8,7,4,6,10,5,2,9\r\n853,748,5,8,6,1,10,2,4,9\r\

n854,675,8,7,8,9,8,6,2,8\r\n855,224,10,7,7,6,2,1,7,9\r\n856,10,8,3,7,4,3,6,4,1\r\n857,708,5,3,5,4,5,9,6,4\r\n858,636,7,3,6,9,5,4,6,3\r\n859,218,7,8,4,4,1,4,6,4\r\n860,193,5,9,4,6,5,7,1,9\r\n861,106,6,6,5,8,3,1,9,7\r\n862,834,8,2,7,4,1,8,9,2\r\n863,597,5,4,8,4,8,7,3,4\r\n864,45,8,5,6,1,5,9,2,9\r\n865,264,5,2,4,4,7,6,4,1\r\n866,219,10,4,5,7,9,10,8,3\r\n867,249,10,2,5,6,8,1,8,9\r\n868,507,9,2,6,2,7,9,7,9\r\n869,383,10,10,8,10,4,9,3,10\r\n870,631,10,8,5,3,9,9,8,3\r\n871,502,6,3,5,1,8,4,7,8\r\n872,792,10,2,6,7,7,5,6,9\r\n873,271,8,10,6,5,7,10,10,2\r\n874,194,6,3,5,4,1,10,8,3\r\n875,937,8,8,4,10,1,5,9,3\r\n876,726,6,4,4,7,7,3,6,4\r\n877,339,6,10,5,9,4,3,6,5\r\n878,841,8,9,8,3,4,4,7,1\r\n879,874,9,7,6,9,6,1,6,3\r\n880,214,6,6,4,3,1,3,4,6\r\n881,924,9,10,5,5,6,4,1,8\r\n882,203,8,7,8,9,4,10,8,10\r\n883,629,8,3,7,4,4,8,1,10\r\n884,354,6,3,7,10,1,1,10,6\r\n885,857,9,8,6,5,7,8,1,9\r\n886,424,5,3,7,3,8,6,5,7\r\n887,872,6,10,8,8,2,2,1,4\r\n888,116,8,5,6,3,5,3,1,9\r\n889,308,9,10,7,10,3,2,10,9\r\n890,698,5,9,6,3,6,9,9,9\r\n891,622,9,10,7,7,6,2,8,4\r\n892,103,9,6,4,6,1,3,10,6\r\n893,464,5,4,8,6,4,10,1,6\r\n894,870,10,4,6,3,8,2,3,7\r\n895,351,8,5,8,10,1,9,7,7\r\n896,628,10,10,4,7,1,7,3,9\r\n897,33,8,5,6,1,8,7,7,2\r\n898,972,7,9,4,1,1,2,1,10\r\n899,535,5,10,5,9,9,8,1,9\r\n900,959,8,4,5,5,10,7,3,2\r\n901,794,10,4,4,8,6,8,6,9\r\n902,313,5,7,7,3,7,10,1,1\r\n903,127,5,8,4,9,7,7,7,6\r\n904,245,10,6,4,9,9,2,7,7\r\n905,773,9,5,8,9,1,10,4,8\r\n906,69,8,6,6,1,9,1,9,7\r\n907,141,8,6,6,5,4,9,5,2\r\n908,139,8,3,4,10,6,1,1,5\r\n909,398,6,9,6,10,7,4,5,9\r\n910,889,7,6,8,6,6,6,7,10\r\n911,995,6,7,8,3,7,7,8,7\r\n912,757,9,5,7,9,7,8,9,1\r\n913,783,5,2,8,2,8,5,7,3\r\n914,420,5,8,8,6,2,4,10,3\r\n915,790,7,5,6,2,3,1,6,6\r\n916,592,7,2,7,10,8,9,5,1\r\n917,978,6,5,8,9,6,6,2,9\r\n918,735,6,4,6,1,7,6,1,5\r\n919,731,5,10,6,9,5,10,5,2\r\n920,932,6,6,4,5,5,3,6,1\r\n921,497,6,4,8,4,6,10,1,6\r\n922,813,8,10,5,8,4,7,5,2\r\n923,2,10,2,7,3,10,4,4,7\r\n924,649,9,2,6,10,4,9,4,2\r\n925,455,8,5,4,2,7,4,1,2\r\n926,593,5,3,5,3,9,10,9,9\r\n927,206,10,8,5,4,8,9,10,6\r\n928,847,7,10,5,7,1,9,10,4\r\n929,233,8,7,7,7,9,2,8,2\r\n930,87,5,10,8,4,8,10,1,9\r\n931,333,6,3,7,6,9,9,9,1\r\n932,738,8,2,5,7,2,7,6,5\r\n933,350,5,6,6,1,8,7,10,10\r\n934,805,8,8,7,10,6,2,2,6\r\n935,700,9,8,6,1,9,6,9,1\r\n936,92,7,6,7,3,2,1,7,6\r\n937,68,5,5,8,8,7,6,10,4\r\n938,746,10,5,6,7,1,1,6,1\r\n939,741,7,9,7,3,10,8,10,5\r\n940,581,9,10,8,2,5,6,7,10\r\n941,677,9,6,6,9,1,10,7,1\r\n942,442,7,8,5,10,8,3,6,4\r\n943,749,9,9,5,2,9,1,10,1\r\n944,25,5,6,4,10,4,1,8,3\r\n945,936,6,7,6,4,1,8,4,10\r\n946,90,9,10,6,7,8,1,2,7\r\n947,715,6,9,6,5,9,1,6,6\r\n948,240,9,9,7,10,5,7,1,6\r\n949,13,6,6,6,3,10,7,2,1\r\n950,126,7,4,6,4,1,5,2,1\r\n951,761,5,9,6,10,10,1,10,6\r\

n952,302,8,4,6,7,1,4,1,8\r\n953,650,8,4,7,9,10,2,8,3\r\
n954,365,10,5,5,3,5,2,3,5\r\n955,905,5,9,6,8,10,2,1,1\r\
n956,415,9,3,5,1,8,9,9,2\r\n957,397,10,7,8,6,6,6,2,6\r\
n958,435,9,9,7,4,1,1,7,5\r\n959,945,9,3,8,2,4,9,1,1\r\
n960,930,8,7,5,1,3,7,2,1\r\n961,687,5,9,7,9,3,1,9,5\r\
n962,852,5,10,5,4,3,10,8,6\r\n963,712,6,5,5,7,8,2,9,7\r\
n964,470,6,10,6,6,7,1,1,2\r\n965,43,6,5,4,1,10,7,4,1\r\
n966,550,5,3,7,8,2,7,7,8\r\n967,844,8,6,4,1,1,8,10,9\r\
n968,150,6,5,8,5,2,10,1,6\r\n969,168,6,3,8,2,8,10,7,3\r\
n970,519,8,7,7,6,10,10,4,3\r\n971,531,9,8,7,6,3,8,3,7\r\
n972,643,9,7,7,7,2,4,3,7\r\n973,428,6,9,4,4,8,6,2,5\r\
n974,659,9,4,8,10,6,6,3,8\r\n975,766,10,2,4,3,4,6,9,4\r\
n976,732,9,2,6,9,4,2,10,10\r\n977,916,10,4,7,3,10,10,7,8\r\
n978,979,9,4,7,10,5,2,4,2\r\n979,372,5,7,7,9,3,5,10,4\r\
n980,778,9,4,8,9,8,5,7,4\r\n981,579,10,3,7,8,9,1,8,8\r\
n982,320,9,6,7,4,3,9,10,2\r\n983,645,5,9,6,6,8,5,10,8\r\
n984,5,6,7,4,2,3,8,10,7\r\n985,294,7,5,4,1,6,2,9,6\r\
n986,117,8,2,5,10,5,4,3,2\r\n987,555,9,2,8,7,2,1,3,10\r\
n988,29,6,9,5,1,6,10,4,5\r\n989,259,8,3,8,9,7,4,10,7\r\
n990,47,8,4,4,9,10,10,2,6\r\n991,678,8,10,5,2,7,4,1,7\r\
n992,543,8,2,4,9,3,3,3,4\r\n993,908,5,2,5,3,2,10,4,8\r\
n994,586,8,2,4,9,8,8,7,7\r\n995,98,9,9,7,2,3,3,8,4\r\
n996,55,8,7,6,2,5,7,7,9\r\n997,913,5,5,6,5,6,7,6,1\r\
n998,199,9,5,8,3,8,1,1,2\r\n999,539,10,2,7,4,3,4,10,1\r\
n1000,759,7,2,4,2,1,5,9,9\r\n'}

```python
import pandas as pd
import matplotlib.pyplot as plt
from wordcloud import WordCloud, STOPWORDS
from textblob import TextBlob

# -----------------------------
# 1. Load Dataset
# -----------------------------
file_path = "student dataset.csv"
df = pd.read_csv(file_path)

print("Columns in dataset:", df.columns.tolist())
print(df.head())

# -----------------------------
# 2. Ratings Analysis
# -----------------------------
# Auto-detect numeric rating columns
rating_cols =
df.select_dtypes(include=["int64","float64"]).columns.tolist()
print("\nDetected Rating Columns:", rating_cols)

# Overall averages
avg_ratings = df[rating_cols].mean()
```

```python
print("\nAverage Ratings:")
print(avg_ratings)

# Plot bar chart of average ratings
avg_ratings.plot(kind="bar", figsize=(8,5), color="skyblue",
title="Average Ratings (Overall)")
plt.ylabel("Average Score")
plt.xticks(rotation=45)
plt.show()

# If dataset contains "Event" column, also group by it
if "Event" in df.columns:
    event_avg = df.groupby("Event")[rating_cols].mean()
    event_avg.plot(kind="bar", figsize=(10,6), title="Average Ratings
by Event")
    plt.ylabel("Average Score")
    plt.xticks(rotation=45)
    plt.show()

# ----------------------------
# 3. Sentiment Analysis
# ----------------------------
if "Feedback" in df.columns:
    df["Sentiment"] = df["Feedback"].astype(str).apply(lambda x:
TextBlob(x).sentiment.polarity)

    print("\nSentiment Summary:")
    print(df["Sentiment"].describe())

    # Classify sentiment
    df["SentimentLabel"] = df["Sentiment"].apply(
        lambda x: "Positive" if x > 0.1 else ("Negative" if x < -0.1
else "Neutral")
    )
    print("\nSentiment Distribution:")
    print(df["SentimentLabel"].value_counts())

    # Pie chart
    df["SentimentLabel"].value_counts().plot(
        kind="pie", autopct="%1.1f%%", figsize=(6,6), title="Feedback
Sentiment Distribution"
    )
    plt.ylabel("")
    plt.show()

    # Word cloud
    all_feedback = " ".join(df["Feedback"].dropna().astype(str))
    wordcloud = WordCloud(width=800, height=400, stopwords=STOPWORDS,
background_color="white").generate(all_feedback)
```

```python
    plt.figure(figsize=(10,5))
    plt.imshow(wordcloud, interpolation="bilinear")
    plt.axis("off")
    plt.title("Common Feedback Themes")
    plt.show()

# -------------------------------
# 4. Key Recommendations
# -------------------------------
print("\n Key Recommendations for Organizers:")

# Find weakest rated areas
weak_areas = avg_ratings.sort_values().head(2).index.tolist()
for area in weak_areas:
    if "Logistics" in area:
        print("- Improve event logistics: registration, seating, sound system.")
    elif "Content" in area:
        print("- Enhance event content: align topics with student interests.")
    elif "Speaker" in area:
        print("- Invite engaging speakers and encourage interaction.")
    elif "Satisfaction" in area:
        print("- Gather real-time feedback during events to boost satisfaction.")
    else:
        print(f"- Focus on improving {area}.")
```

```
Columns in dataset: ['Unnamed: 0', 'Student ID', 'Well versed with the
subject', 'Explains concepts in an understandable way', 'Use of
presentations', 'Degree of difficulty of assignments', 'Solves doubts
willingly', 'Structuring of the course', 'Provides support for
students going above and beyond', 'Course recommendation based on
relevance']
   Unnamed: 0  Student ID  Well versed with the subject  \
0           0         340                             5
1           1         253                             6
2           2         680                             7
3           3         806                             9
4           4         632                             8

   Explains concepts in an understandable way  Use of presentations  \
0                                            2                      7
1                                            5                      8
2                                            7                      6
3                                            6                      7
4                                           10                      8

   Degree of difficulty of assignments  Solves doubts willingly  \
0                                     6                        9
```

```
1                                          6                              2
2                                          5                              4
3                                          1                              5
4                                          4                              6

   Structuring of the course  \
0                          2
1                          1
2                          2
3                          9
4                          6

   Provides support for students going above and beyond  \
0                                                  1
1                                                  2
2                                                  3
3                                                  4
4                                                  9

   Course recommendation based on relevance
0                                         8
1                                         9
2                                         1
3                                         6
4                                         9
```
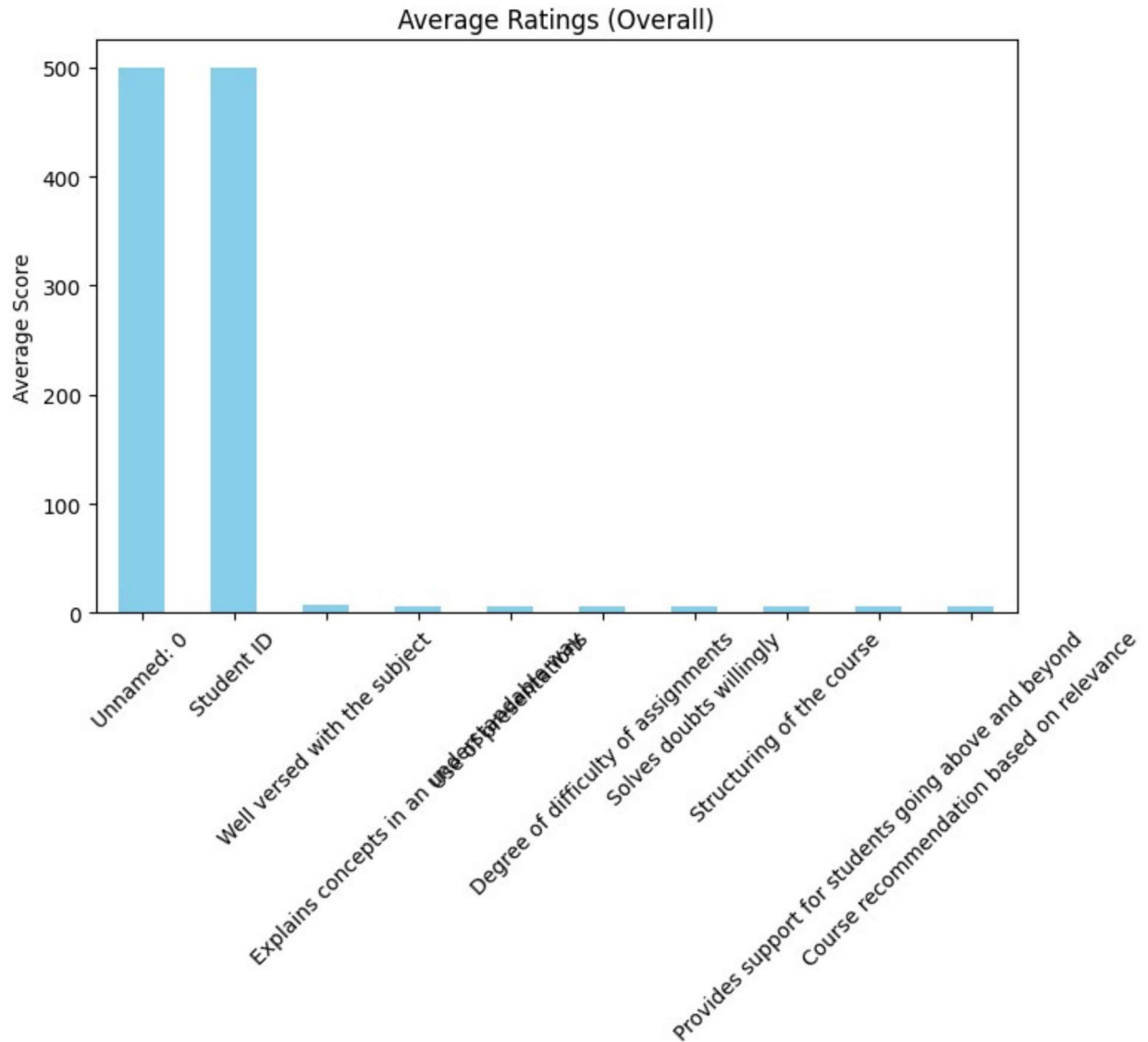
Detected Rating Columns: ['Unnamed: 0', 'Student ID', 'Well versed with the subject', 'Explains concepts in an understandable way', 'Use of presentations', 'Degree of difficulty of assignments', 'Solves doubts willingly', 'Structuring of the course', 'Provides support for students going above and beyond', 'Course recommendation based on relevance']

```
Average Ratings:
Unnamed: 0                                              500.000000
Student ID                                              500.000000
Well versed with the subject                              7.497502
Explains concepts in an understandable way                6.081918
Use of presentations                                      5.942058
Degree of difficulty of assignments                       5.430569
Solves doubts willingly                                   5.474525
Structuring of the course                                 5.636364
Provides support for students going above and beyond      5.662338
Course recommendation based on relevance                  5.598402
dtype: float64
```

Average Ratings (Overall)

 Key Recommendations for Organizers:
- Focus on improving Degree of difficulty of assignments.
- Focus on improving Solves doubts willingly.