**Lab on Game theory**

Write a program to check whether a game is stable or unstable. Solve the pay-off given table matrix and determine the optimal strategies and the value of game.

Prepare a meaningful menu list.

1.

|  |  |  |
| --- | --- | --- |
|  |  | Player B  1 2 |
| Player A | 1  2 | 5 2  3 4 |

2.

|  |  |  |
| --- | --- | --- |
|  |  | Player B  1 2 3 4 |
| Player A | 1  2 | -2 3 5 2  5 -1 -2 0 |

3.

|  |  |  |
| --- | --- | --- |
|  |  | Player B  1 2 3 4 |
| Player A | 1  2 | 4 0 6 -2  2 6 1 7 |

4.

|  |  |  |
| --- | --- | --- |
|  |  | Player B  1 2 3 4 |
| Player A | 1  2  3  4 | –1 0 4 –1  5 1 3 1  –2 0 –1 4  –3 –2 4 5 |