

4. Long jump

On the long jump qualifying contest of potential Olympic athletes three teams are represented by three competitors each. File `tavo1.txt` contains the data of the competitors and their results. (“x” stands for illegal jumps.)

Solve the following exercises using a worksheet processing program.

During the solution take the following into consideration.

- *Whenever possible, use a formula, function or reference in the solution.*
- *There are parts in the exercise that use the results from a previous question. If you could not solve the previous part completely, use its solution as it is, or instead of a formula resulting in a number use “650” or “5%” or instead of a text write the words “I don’t know” and work on with these values. This way you can receive marks for these exercise parts as well.*


1. Import file `tavo1.txt` into the worksheet processor and save it as `tavo1`, in the default format of the worksheet processor.
2. Insert a new column between the team column and the column of the 1st jump. The heading of the column should be **Record**. Write a random value between 610 and 690 into each row.
3. Display the unit cm for the numeric values located in the columns of the record and each jump.
4. Display the best result of each jumper on the competition in the column following the 6th jump. The heading of the column should be **Best result**.
5. Arrange the records of the table into decreasing order based on the achieved (best) results.
6. A team score is calculated from the results of the competitors, it is determined as the sum of the best results of the individual competitors. Insert (copy) the names of the teams into range `C13:C15`, then determine the team scores of the individual teams in column `D` next to the names of the teams using a function. Create the formula containing the function in such a way that it can be copied without error.
7. Copy range `A1:C10` to the range starting with `A18` as top left position in such a way that the data of the copy change when the original values change. Display the best result of each player in column `D` in each row.
8. Insert word **Record** into cell `E18`, under it display for each competitor if they achieved individual record (the best result on the race is greater than his displayed record), otherwise, nothing should be displayed in the cell. Compose the formula containing the function in such way that it can be copied.
9. Display in column `L` the number of the jump when the competitor made his best result. The heading of the column should be **Best jump**.
10. Create a bar chart at the place shown in the example, which displays the result of the best three competitors. The title of the chart should be **Winning competitors**. The chart should not include a legend, the competitors’ names should be displayed only above the columns. The colour of the individual columns should resemble the colour of the medal (gold-yellow, silver-grey, bronze-brown)!

11. Insert a blank row at the top of the page, whose first cell should contain the text **Contest of potential Olympic athletes**.
12. Complete the worksheet with the texts that appear in the example, then carry out the formatting operations in accordance with the example seen on the page.
13. Insert the Olympic five circles (*olimpia.gif*) into the centre of the blank space to the left of the results of the team competition. Its width should not exceed 2 columns and its height should not exceed 3 rows.

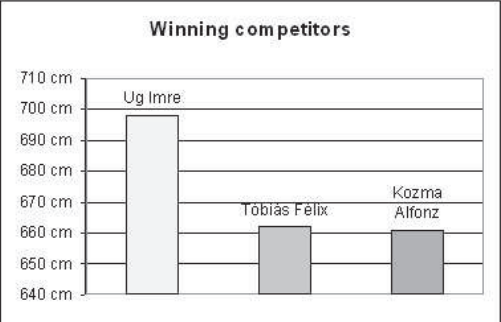
30 marks

Contest of potential Olympic athletes

| Starting number | Name | Team | Record | 1st jump | 2nd jump | 3rd jump | 4th jump | 5th jump | 6th jump | Best result | Best jump |
|-----------------|---------------|-------------------|--------|----------|----------|----------|----------|----------|----------|---------------|-----------|
| 623 | Ug Imre | Kalocsai Rozmárok | 670 cm | 640 cm | x | 698 cm | 627 cm | 599 cm | 661 cm | 698 cm | 3 |
| 534 | Tóbiás Félix | Pécsi Kenguruk | 681 cm | 656 cm | 608 cm | 662 cm | 622 cm | 552 cm | 605 cm | 662 cm | 3 |
| 245 | Kozma Alfonz | Pécsi Kenguruk | 612 cm | 556 cm | 594 cm | 592 cm | 661 cm | x | 632 cm | 661 cm | 4 |
| 758 | Csabai Kázmér | Miskolci Párducok | 690 cm | 659 cm | 653 cm | x | 651 cm | x | 657 cm | 659 cm | 1 |
| 232 | Pác János | Miskolci Párducok | 663 cm | 591 cm | 639 cm | 567 cm | 591 cm | 616 cm | 648 cm | 648 cm | 6 |
| 553 | Csonka Elemér | Miskolci Párducok | 631 cm | 642 cm | x | 647 cm | 579 cm | x | 611 cm | 647 cm | 3 |
| 632 | Örvös Eduárd | Pécsi Kenguruk | 671 cm | 575 cm | 644 cm | 603 cm | 610 cm | 597 cm | 600 cm | 644 cm | 2 |
| 632 | Csász Béla | Kalocsai Rozmárok | 680 cm | 620 cm | 586 cm | 619 cm | 641 cm | x | 556 cm | 641 cm | 4 |
| 532 | Haragos Csaba | Kalocsai Rozmárok | 643 cm | 619 cm | 609 cm | 582 cm | 622 cm | 585 cm | 603 cm | 622 cm | 4 |



| Team score | |
|-------------------|------|
| Miskolci Párducok | 1954 |
| Pécsi Kenguruk | 1967 |
| Kalocsai Rozmárok | 1961 |



| Individual results | | | | |
|--------------------|---------------|-------------------|-------------|----------|
| Starting number | Name | Team | Best result | Record |
| 623 | Ug Imre | Kalocsai Rozmárok | 698 cm | personal |
| 534 | Tóbiás Félix | Pécsi Kenguruk | 662 cm | |
| 245 | Kozma Alfonz | Pécsi Kenguruk | 661 cm | personal |
| 758 | Csabai Kázmér | Miskolci Párducok | 659 cm | |
| 232 | Pác János | Miskolci Párducok | 648 cm | |
| 553 | Csonka Elemér | Miskolci Párducok | 647 cm | personal |
| 632 | Örvös Eduárd | Pécsi Kenguruk | 644 cm | |
| 632 | Csász Béla | Kalocsai Rozmárok | 641 cm | |
| 532 | Haragos Csaba | Kalocsai Rozmárok | 622 cm | |

The source of the picture is <http://www.mob.hu/belso/images/olimpia.gif>