| Exercitiu 1                                    |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|
| Hrg  | bubble   | matrix   | perm   | puzzle   | queens   | sort   | tower  | tree   | Average  | Acuratetea de predictie a simulatorului PPm complet  |
| 5  | 82,62%   | 93,39%   | 61,32%   | 86,31%   | 57,74%   | 61,27%   | 67,48%   | 59,06%   | 71,15%   | 100,00% — bubble   |
| 10   | 81,21%   | 96,33%   | 68,30%   | 88,05%   | 62,03%   | 61,87%   | 64,59%   | 74,39%   | 74,60%   | <u>%</u>   |
| 20   | 81,98%   | 96,57%   | 70,73%   | 89,59%   | 66,35%   | 63,58%   | 59,51%   | 73,27%   | 75,20%   | %  |
| 30   | 82,54%   | 96,57%   | 78,38%   | 89,67%   | 64,66%   | 63,36%   | 66,88%   | 72,21%   | 76,78%   |  |
| 40   | 82,95%   | 96,46%   | 78,68%   | 90,06%   | 65,45%   | 63,43%   | 72,89%   | 70,49%   | 77,55%   | <u>%</u> □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □   |
| 50   | 82,72%   | 96,45%   | 79,38%   | 90,46%   | 65,01%   | 63,75%   | 71,34%   | 70,68%   | 77,47%   |  |
| 100  | 83,03%   | 96,67%   | 80,17%   | 90,89%   | 66,10%   | 63,80%   | 74,74%   | 74,43%   | 78,73%   | % 50,00% ■ sort  |
| 200  | 83,02%   | 96,66%   | 80,17%   | 91,15%   | 68,04%   | 64,55%   | 75,85%   | 75,01%   | 79,31%   | <u>%</u> tower   |
| 300  | -  | 96,67%   | 80,17%   | 91,46%   | 68,44%   | 64,52%   | 75,85%   | 75,17%   | 79,48%   | — 25.00% — ree   |
| 500  | 83,68%   | 96,67%   | 80,17%   | 91,61%   | 68,96%   | 64,55%   | 75,85%   | 73,62%   | 79,39%   | % Average  |
|  |  |  |  |  |  |  |  |  |  | Average  |
|  |  |  |  |  |  |  |  |  |  | 0,00%  |
|  |  |  |  |  |  |  |  |  |  | 5 10 20 30 40 50 100 200 300 500   |
|  |  |  |  |  |  |  |  |  |  | Hrg  |
|  |  |  |  |  |  |  |  |  |  | ·  |
| Exercitiu 2                                    |  |  |  |  |  |  |  |  |  |  |
| 11   |  |  |  |  |  |  |  |  |  |  |
| Hrg  | bubble   | matrix   | •  | puzle  | •  |  |  |  | Average  |  |
| Hrg 5  |  | matrix 96,68%  | 79,70%   | <b>puzle</b> 87,20%  | 43,51%   | 61,59%   | <b>tower</b> 70,68%  | <b>tree</b> 69,15%   | 71,51%   | - '  |
|  | 63,55%   | 96,68%<br>96,67%   | 79,70%<br>80,14%   | 87,20%<br>88,31%   | 43,51%<br>44,73%   | 61,59%<br>61,60%   |  |  | 71,51%<br>73,10%   | 76 100,00% bubble  |
| 5  | 63,55%<br>72,84%<br>74,60%   | 96,68%<br>96,67%<br>96,65%   | 79,70%<br>80,14%<br>80,16%   | 87,20%<br>88,31%<br>90,51%   | 43,51%<br>44,73%<br>44,41%   | 61,59%<br>61,60%<br>61,89%   | 70,68%<br>75,85%<br>75,84%   | 69,15%<br>64,64%<br>73,28%   | 71,51%<br>73,10%<br>74,67%   | bubble matrix  |
| 5  | 63,55%<br>72,84%<br>74,60%   | 96,68%<br>96,67%   | 79,70%<br>80,14%   | 87,20%<br>88,31%   | 43,51%<br>44,73%   | 61,59%<br>61,60%   | 70,68%<br>75,85%   | 69,15%<br>64,64%   | 71,51%<br>73,10%   | 00,00%   |
| 5<br>10<br>20                                  | 63,55%<br>72,84%<br>74,60%<br>74,94%   | 96,68%<br>96,67%<br>96,65%   | 79,70%<br>80,14%<br>80,16%   | 87,20%<br>88,31%<br>90,51%   | 43,51%<br>44,73%<br>44,41%   | 61,59%<br>61,60%<br>61,89%   | 70,68%<br>75,85%<br>75,84%   | 69,15%<br>64,64%<br>73,28%   | 71,51%<br>73,10%<br>74,67%   | ½6     100,00%       ½6     ■ matrix       ½6     75,00%   |
| 50<br>10<br>20<br>30<br>40<br>50               | 63,55%<br>72,84%<br>74,60%<br>74,94%<br>74,99%<br>75,19%                               | 96,68%<br>96,67%<br>96,65%<br>96,63%<br>96,60%<br>96,58%                     | 79,70%<br>80,14%<br>80,16%<br>80,16%<br>80,16%<br>80,15%                               | 87,20%<br>88,31%<br>90,51%<br>90,70%<br>90,74%<br>90,77%                               | 43,51%<br>44,73%<br>44,41%<br>44,84%<br>46,19%<br>45,76%                               | 61,59%<br>61,60%<br>61,89%<br>62,58%<br>62,33%<br>62,62%                               | 70,68%<br>75,85%<br>75,84%<br>75,82%<br>75,81%<br>73,40%                     | 69,15%<br>64,64%<br>73,28%<br>73,34%<br>73,42%<br>73,42%                               | 71,51%<br>73,10%<br>74,67%<br>74,88%<br>75,03%<br>74,74%                               | 100,00%  |
| 55<br>100<br>20<br>30<br>40<br>50              | 63,55%<br>72,84%<br>74,60%<br>74,94%<br>74,99%<br>75,19%<br>75,24%                     | 96,68%<br>96,67%<br>96,65%<br>96,63%<br>96,60%<br>96,58%<br>96,46%           | 79,70%<br>80,14%<br>80,16%<br>80,16%<br>80,16%<br>80,15%<br>80,15%                     | 87,20%<br>88,31%<br>90,51%<br>90,70%<br>90,74%<br>90,77%<br>90,88%                     | 43,51%<br>44,73%<br>44,41%<br>44,84%<br>46,19%<br>45,76%<br>47,67%                     | 61,59%<br>61,60%<br>61,89%<br>62,58%<br>62,33%<br>62,62%<br>63,12%                     | 70,68%<br>75,85%<br>75,84%<br>75,82%<br>75,81%<br>73,40%<br>75,76%           | 69,15%<br>64,64%<br>73,28%<br>73,34%<br>73,42%<br>73,42%<br>73,33%                     | 71,51%<br>73,10%<br>74,67%<br>74,88%<br>75,03%<br>74,74%<br>75,32%                     | 100,00%  |
| 50<br>10<br>20<br>30<br>40<br>50               | 63,55%<br>72,84%<br>74,60%<br>74,94%<br>74,99%<br>75,19%<br>75,24%<br>75,15%           | 96,68%<br>96,67%<br>96,65%<br>96,63%<br>96,60%<br>96,58%<br>96,46%<br>96,23% | 79,70%<br>80,14%<br>80,16%<br>80,16%<br>80,16%<br>80,15%<br>80,12%<br>80,05%           | 87,20%<br>88,31%<br>90,51%<br>90,70%<br>90,74%<br>90,77%                               | 43,51%<br>44,73%<br>44,41%<br>44,84%<br>46,19%<br>45,76%<br>47,67%<br>47,23%           | 61,59%<br>61,60%<br>61,89%<br>62,58%<br>62,33%<br>62,62%<br>63,12%<br>63,29%           | 70,68%<br>75,85%<br>75,84%<br>75,82%<br>75,81%<br>73,40%<br>75,76%<br>75,69% | 69,15%<br>64,64%<br>73,28%<br>73,34%<br>73,42%<br>73,42%<br>73,33%<br>73,18%           | 71,51%<br>73,10%<br>74,67%<br>74,88%<br>75,03%<br>74,74%<br>75,32%<br>75,21%           |  |
| 55<br>10<br>20<br>30<br>40<br>50<br>100<br>200 | 63,55%<br>72,84%<br>74,60%<br>74,94%<br>74,99%<br>75,19%<br>75,24%<br>75,15%<br>75,03% | 96,68%<br>96,67%<br>96,65%<br>96,63%<br>96,60%<br>96,58%<br>96,46%<br>96,23% | 79,70%<br>80,14%<br>80,16%<br>80,16%<br>80,16%<br>80,15%<br>80,12%<br>80,05%<br>79,98% | 87,20%<br>88,31%<br>90,51%<br>90,70%<br>90,74%<br>90,77%<br>90,88%<br>90,86%<br>90,84% | 43,51%<br>44,73%<br>44,41%<br>44,84%<br>46,19%<br>45,76%<br>47,67%<br>47,23%<br>48,60% | 61,59%<br>61,60%<br>61,89%<br>62,58%<br>62,33%<br>62,62%<br>63,12%<br>63,29%<br>63,33% | 70,68% 75,85% 75,84% 75,82% 75,81% 73,40% 75,76% 75,69% 75,58%               | 69,15%<br>64,64%<br>73,28%<br>73,34%<br>73,42%<br>73,42%<br>73,33%<br>73,18%<br>73,03% | 71,51%<br>73,10%<br>74,67%<br>74,88%<br>75,03%<br>74,74%<br>75,32%<br>75,21%<br>75,30% |  |
| 55<br>10<br>20<br>30<br>40<br>50<br>100        | 63,55%<br>72,84%<br>74,60%<br>74,94%<br>74,99%<br>75,19%<br>75,24%<br>75,15%<br>75,03% | 96,68%<br>96,67%<br>96,65%<br>96,63%<br>96,60%<br>96,58%<br>96,46%<br>96,23% | 79,70%<br>80,14%<br>80,16%<br>80,16%<br>80,16%<br>80,15%<br>80,12%<br>80,05%           | 87,20%<br>88,31%<br>90,51%<br>90,70%<br>90,74%<br>90,77%<br>90,88%<br>90,86%           | 43,51%<br>44,73%<br>44,41%<br>44,84%<br>46,19%<br>45,76%<br>47,67%<br>47,23%           | 61,59%<br>61,60%<br>61,89%<br>62,58%<br>62,33%<br>62,62%<br>63,12%<br>63,29%           | 70,68%<br>75,85%<br>75,84%<br>75,82%<br>75,81%<br>73,40%<br>75,76%<br>75,69% | 69,15%<br>64,64%<br>73,28%<br>73,34%<br>73,42%<br>73,42%<br>73,33%<br>73,18%           | 71,51%<br>73,10%<br>74,67%<br>74,88%<br>75,03%<br>74,74%<br>75,32%<br>75,21%           | 100,00%  |
| 55<br>10<br>20<br>30<br>40<br>50<br>100<br>200 | 63,55%<br>72,84%<br>74,60%<br>74,94%<br>74,99%<br>75,19%<br>75,24%<br>75,15%<br>75,03% | 96,68%<br>96,67%<br>96,65%<br>96,63%<br>96,60%<br>96,58%<br>96,46%<br>96,23% | 79,70%<br>80,14%<br>80,16%<br>80,16%<br>80,16%<br>80,15%<br>80,12%<br>80,05%<br>79,98% | 87,20%<br>88,31%<br>90,51%<br>90,70%<br>90,74%<br>90,77%<br>90,88%<br>90,86%<br>90,84% | 43,51%<br>44,73%<br>44,41%<br>44,84%<br>46,19%<br>45,76%<br>47,67%<br>47,23%<br>48,60% | 61,59%<br>61,60%<br>61,89%<br>62,58%<br>62,33%<br>62,62%<br>63,12%<br>63,29%<br>63,33% | 70,68% 75,85% 75,84% 75,82% 75,81% 73,40% 75,76% 75,69% 75,58%               | 69,15%<br>64,64%<br>73,28%<br>73,34%<br>73,42%<br>73,42%<br>73,33%<br>73,18%<br>73,03% | 71,51%<br>73,10%<br>74,67%<br>74,88%<br>75,03%<br>74,74%<br>75,32%<br>75,21%<br>75,30% | 100,00%   bubble   matrix   perm   |
| 55<br>10<br>20<br>30<br>40<br>50<br>100<br>200 | 63,55%<br>72,84%<br>74,60%<br>74,94%<br>74,99%<br>75,19%<br>75,24%<br>75,15%<br>75,03% | 96,68%<br>96,67%<br>96,65%<br>96,63%<br>96,60%<br>96,58%<br>96,46%<br>96,23% | 79,70%<br>80,14%<br>80,16%<br>80,16%<br>80,16%<br>80,15%<br>80,12%<br>80,05%<br>79,98% | 87,20%<br>88,31%<br>90,51%<br>90,70%<br>90,74%<br>90,77%<br>90,88%<br>90,86%<br>90,84% | 43,51%<br>44,73%<br>44,41%<br>44,84%<br>46,19%<br>45,76%<br>47,67%<br>47,23%<br>48,60% | 61,59%<br>61,60%<br>61,89%<br>62,58%<br>62,33%<br>62,62%<br>63,12%<br>63,29%<br>63,33% | 70,68% 75,85% 75,84% 75,82% 75,81% 73,40% 75,76% 75,69% 75,58%               | 69,15%<br>64,64%<br>73,28%<br>73,34%<br>73,42%<br>73,42%<br>73,33%<br>73,18%<br>73,03% | 71,51%<br>73,10%<br>74,67%<br>74,88%<br>75,03%<br>74,74%<br>75,32%<br>75,21%<br>75,30% | 100,00%  |
| 55<br>10<br>20<br>30<br>40<br>50<br>100<br>200 | 63,55%<br>72,84%<br>74,60%<br>74,94%<br>74,99%<br>75,19%<br>75,24%<br>75,15%<br>75,03% | 96,68%<br>96,67%<br>96,65%<br>96,63%<br>96,60%<br>96,58%<br>96,46%<br>96,23% | 79,70%<br>80,14%<br>80,16%<br>80,16%<br>80,16%<br>80,15%<br>80,12%<br>80,05%<br>79,98% | 87,20%<br>88,31%<br>90,51%<br>90,70%<br>90,74%<br>90,77%<br>90,88%<br>90,86%<br>90,84% | 43,51%<br>44,73%<br>44,41%<br>44,84%<br>46,19%<br>45,76%<br>47,67%<br>47,23%<br>48,60% | 61,59%<br>61,60%<br>61,89%<br>62,58%<br>62,33%<br>62,62%<br>63,12%<br>63,29%<br>63,33% | 70,68% 75,85% 75,84% 75,82% 75,81% 73,40% 75,76% 75,69% 75,58%               | 69,15%<br>64,64%<br>73,28%<br>73,34%<br>73,42%<br>73,42%<br>73,33%<br>73,18%<br>73,03% | 71,51%<br>73,10%<br>74,67%<br>74,88%<br>75,03%<br>74,74%<br>75,32%<br>75,21%<br>75,30% | Matrix   M |
| 55<br>10<br>20<br>30<br>40<br>50<br>100<br>200 | 63,55%<br>72,84%<br>74,60%<br>74,94%<br>74,99%<br>75,19%<br>75,24%<br>75,15%<br>75,03% | 96,68%<br>96,67%<br>96,65%<br>96,63%<br>96,60%<br>96,58%<br>96,46%<br>96,23% | 79,70%<br>80,14%<br>80,16%<br>80,16%<br>80,16%<br>80,15%<br>80,12%<br>80,05%<br>79,98% | 87,20%<br>88,31%<br>90,51%<br>90,70%<br>90,74%<br>90,77%<br>90,88%<br>90,86%<br>90,84% | 43,51%<br>44,73%<br>44,41%<br>44,84%<br>46,19%<br>45,76%<br>47,67%<br>47,23%<br>48,60% | 61,59%<br>61,60%<br>61,89%<br>62,58%<br>62,33%<br>62,62%<br>63,12%<br>63,29%<br>63,33% | 70,68% 75,85% 75,84% 75,82% 75,81% 73,40% 75,76% 75,69% 75,58%               | 69,15%<br>64,64%<br>73,28%<br>73,34%<br>73,42%<br>73,42%<br>73,33%<br>73,18%<br>73,03% | 71,51%<br>73,10%<br>74,67%<br>74,88%<br>75,03%<br>74,74%<br>75,32%<br>75,21%<br>75,30% | 100,00%   bubble   matrix   perm   puzle   queens   sort   tower   tree   Average  |
| 55<br>10<br>20<br>30<br>40<br>50<br>100<br>200 | 63,55%<br>72,84%<br>74,60%<br>74,94%<br>74,99%<br>75,19%<br>75,24%<br>75,15%<br>75,03% | 96,68%<br>96,67%<br>96,65%<br>96,63%<br>96,60%<br>96,58%<br>96,46%<br>96,23% | 79,70%<br>80,14%<br>80,16%<br>80,16%<br>80,16%<br>80,15%<br>80,12%<br>80,05%<br>79,98% | 87,20%<br>88,31%<br>90,51%<br>90,70%<br>90,74%<br>90,77%<br>90,88%<br>90,86%<br>90,84% | 43,51%<br>44,73%<br>44,41%<br>44,84%<br>46,19%<br>45,76%<br>47,67%<br>47,23%<br>48,60% | 61,59%<br>61,60%<br>61,89%<br>62,58%<br>62,33%<br>62,62%<br>63,12%<br>63,29%<br>63,33% | 70,68% 75,85% 75,84% 75,82% 75,81% 73,40% 75,76% 75,69% 75,58%               | 69,15%<br>64,64%<br>73,28%<br>73,34%<br>73,42%<br>73,42%<br>73,33%<br>73,18%<br>73,03% | 71,51%<br>73,10%<br>74,67%<br>74,88%<br>75,03%<br>74,74%<br>75,32%<br>75,21%<br>75,30% | Matrix   M |
| 55<br>10<br>20<br>30<br>40<br>50<br>100<br>200 | 63,55%<br>72,84%<br>74,60%<br>74,94%<br>74,99%<br>75,19%<br>75,24%<br>75,15%<br>75,03% | 96,68%<br>96,67%<br>96,65%<br>96,63%<br>96,60%<br>96,58%<br>96,46%<br>96,23% | 79,70%<br>80,14%<br>80,16%<br>80,16%<br>80,16%<br>80,15%<br>80,12%<br>80,05%<br>79,98% | 87,20%<br>88,31%<br>90,51%<br>90,70%<br>90,74%<br>90,77%<br>90,88%<br>90,86%<br>90,84% | 43,51%<br>44,73%<br>44,41%<br>44,84%<br>46,19%<br>45,76%<br>47,67%<br>47,23%<br>48,60% | 61,59%<br>61,60%<br>61,89%<br>62,58%<br>62,33%<br>62,62%<br>63,12%<br>63,29%<br>63,33% | 70,68% 75,85% 75,84% 75,82% 75,81% 73,40% 75,76% 75,69% 75,58%               | 69,15%<br>64,64%<br>73,28%<br>73,34%<br>73,42%<br>73,42%<br>73,33%<br>73,18%<br>73,03% | 71,51%<br>73,10%<br>74,67%<br>74,88%<br>75,03%<br>74,74%<br>75,32%<br>75,21%<br>75,30% | 100,00%   bubble   matrix   perm   puzle   queens   sort   tower   tree   Average  |