**Učni list 2**

Hana gre vsako jutro v šolo po isti poti. Pot v šolo je simbolično prikazana v tabeli s kvadratki. Vsak korak je predstavljen z enim kvadratkom. Včasih ji je dolgčas in zato preskakuje kvadratke ali pa po njih stopa v raznih vzorcih.

1. Hana je odšla v šolo 2-krat. Prvič je stopila na vsak drugi kvadratek, drugič pa na vsakega tretjega. Ko prvič stopi na kvadratek, ga obarva črno, če pa stopi na že obarvan kvadratek pa zopet postane bel. V tabelo nariši vzorček (črno-belo) ki je ostal za Hano po posamezni poti.

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|  | 1 |  |  |  | 5 |  |  |  |  | 10 |  |  |  |  | 15 |  |  |  |  | 20 |  |  |  |  | 25 |  |  |  |  | 30 |  |  |  |  | 35 |  |
| Pot na začetku |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Stopi na vsak 2. kvadrat |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Stopi na vsak 3. kvadrat |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

1. Kaj opaziš? Napiši na kratko svoja opažanja. Ali lahko oceniš, kako bi bil pobarvan 82., 83. in kako 84. kvadratek?

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1. Hana je odšla v šolo 4-krat, podatki so v spodnji tabeli. Nariši vzorčke (črno=1, belo=0) ki so ostali za Hano po vsaki poti. Spet upoštevaj pravilo o zamenjavi barve (črno=1, belo=0), ko ponovno stopi na že obarvan kvadratek.

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|  | 1 |  |  |  | 5 |  |  |  |  | 10 |  |  |  |  | 15 |  |  |  |  | 20 |  |  |  |  | 25 |  |  |  |  | 30 |  |  |  |  | 35 |  |
| Pot na začetku | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Stopi na vsak 2. kvadrat |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Stopi na vsak 3. kvadrat |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Stopi na vsak 4. kvadrat |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Stopi na vsak 6. kvadrat |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

1. Kaj opaziš? Napiši na kratko svoja opažanja. Ali lahko ugotoviš, kako bi bili označeni (0, 1) kvadratki 90, 91, 92, 96? Ali obstaja splošno pravilo?

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1. Z besedami napiši algoritem, ki bi ga lahko izvedel računalnik in prikazal vzorec pobarvanih kvadratov po končanih vseh poteh.