DX.Y	Y HGF	X EDCBA	CURRENT RD- abcdei_fghj	CURRENT RD+ abcdei_fghj	RD	DX.Y	Y HGF	X EDCBA	CURRENT RD- abcdei_fghj	CURRENT RD+ abcdei_fghj	RD
D0.0	000	00000	100111_0100	011000_1011	same	D0.1	001	00000	100111_1001	011000_1001	flip
D1.0	000	00001	011101_0100	100010_1011	same	D1.1	001	00001	011101_1001	100010_1001	flip
D2.0	000	00010	101101_0100	010010_1011	same	D2.1	001	00010	101101_1001	010010_1001	flip
D3.0	000	00011	110001_1011	110001_0100	flip	D3.1	001	00011	110001_1001	110001_1001	same
D4.0	000	00100	110101_0100	001010_1011	same	D4.1	001	00100	110101_1001	001010_1001	flip
D5.0	000	00101	101001_1011	101001_0100	flip	D5.1	001	00101	101001_1001	101001_1001	same
D6.0	000	00110	011001_1011	011001_0100	flip	D6.1	001	00110	011001_1001	011001_1001	same
D7.0	000	00111	111000_1011	000111_0100	flip	D7.1	001	00111	111000_1001	000111_1001	same
D8.0	000	01000	111001_0100	000110_1011	same	D8.1	001	01000	111001_1001	000110_1001	flip
D9.0	000	01001	100101_1011	100101_0100	flip	D9.1	001	01001	100101_1001	100101_1001	same
D10.0	000	01010	010101_1011	010101_0100	flip	D10.1	001	01010	010101_1001	010101_1001	same
D11.0	000	01011	110100_1011	110100_0100	flip	D11.1	001	01011	110100_1001	110100_1001	same
D12.0	000	01100	001101_1011	001101_0100	flip	D12.1	001	01100	001101_1001	001101_1001	same
D13.0	000	01101	101100_1011	101100_0100	flip	D13.1	001	01101	101100_1001	101100_1001	same
D14.0	000	01110	011100_1011	011100_0100	flip	D14.1	001	01110	011100_1001	011100_1001	same
D15.0	000	01111	010111_0100	101000_1011	same	D15.1	001	01111	010111_1001	101000_1001	flip
D16.0	000	10000	011011_0100	100100_1011	same	D16.1	001	10000	011011_1001	100100_1001	flip
D17.0	000	10001	100011_1011	100011_0100	flip	D17.1	001	10001	100011_1001	100011_1001	same
D18.0	000	10010	010011_1011	010011_0100	flip	D18.1	001	10010	010011_1001	010011_1001	same
D19.0	000	10011	110010_1011	110010_0100	flip	D19.1	001	10011	110010_1001	110010_1001	same
D20.0	000	10100	001011_1011	001011_0100	flip	D20.1	001	10100	001011_1001	001011_1001	same
D21.0	000	10101	101010_1011	101010_0100	flip	D21.1	001	10101	101010_1001	101010_1001	same
D22.0	000	10110	011010_1011	011010_0100	flip	D22.1	001	10110	011010_1001	011010_1001	same
D23.0	000	10111	111010_0100	000101_1011	same	D23.1	001	10111	111010_1001	000101_1001	flip
D24.0	000	11000	110011_0100	001100_1011	same	D24.1	001	11000	110011_1001	001100_1001	flip
D25.0	000	11001	100110_1011	100110_0100	flip	D25.1	001	11001	100110_1001	100110_1001	same
D26.0	000	11010	010110_1011	010110_0100	flip	D26.1	001	11010	010110_1001	010110_1001	same
D27.0	000	11011	110110_0100	001001_1011	same	D27.1	001	11011	110110_1001	001001_1001	flip
D28.0	000	11100	001110_1011	001110_0100	flip	D28.1	001	11100	001110_1001	001110_1001	same
D29.0	000	11101	101110_0100	010001_1011	same	D29.1	001	11101	101110_1001	010001_1001	flip
D30.0	000	11110	011110_0100	100001_1011	same	D30.1	001	11110	011110_1001	100001_1001	flip
D31.0	000	11111	101011_0100	010100_1011	same	D31.1	001	11111	101011_1001	010100_1001	flip

DX.Y	Y HGF	X EDCBA	CURRENT RD- abcdei_fghj	CURRENT RD+ abcdei_fghj	RD	DX.Y	Y HGF	X EDCBA	CURRENT RD- abcdei_fghj	CURRENT RD+ abcdei_fghj	RD
D0.2	010	00000	100111_0101	011000_0101	flip	D0.3	011	00000	100111_0011	011000_1100	flip
D1.2	010	00001	011101_0101	100010_0101	flip	D1.3	011	00001	011101_0011	100010_1100	flip
D2.2	010	00010	101101_0101	010010_0101	flip	D2.3	011	00010	101101_0011	010010_1100	flip
D3.2	010	00011	110001_0101	110001_0101	same	D3.3	011	00011	110001_1100	110001_0011	same
D4.2	010	00100	110101_0101	001010_0101	flip	D4.3	011	00100	110101_0011	001010_1100	flip
D5.2	010	00101	101001_0101	101001_0101	same	D5.3	011	00101	101001_1100	101001_0011	same
D6.2	010	00110	011001_0101	011001_0101	same	D6.3	011	00110	011001_1100	011001_0011	same
D7.2	010	00111	111000_0101	000111_0101	same	D7.3	011	00111	111000_1100	000111_0011	same
D8.2	010	01000	111001_0101	000110_0101	flip	D8.3	011	01000	111001_0011	000110_1100	flip
D9.2	010	01001	100101_0101	100101_0101	same	D9.3	011	01001	100101_1100	100101_0011	same
D10.2	010	01010	010101_0101	010101_0101	same	D10.3	011	01010	010101_1100	010101_0011	same
D11.2	010	01011	110100_0101	110100_0101	same	D11.3	011	01011	110100_1100	110100_0011	same
D12.2	010	01100	001101_0101	001101_0101	same	D12.3	011	01100	001101_1100	001101_0011	same
D13.2	010	01101	101100_0101	101100_0101	same	D13.3	011	01101	101100_1100	101100_0011	same
D14.2	010	01110	011100_0101	011100_0101	same	D14.3	011	01110	011100_1100	011100_0011	same
D15.2	010	01111	010111_0101	101000_0101	flip	D15.3	011	01111	010111_0011	101000_1100	flip
D16.2	010	10000	011011_0101	100100_0101	flip	D16.3	011	10000	011011_0011	100100_1100	flip
D17.2	010	10001	100011_0101	100011_0101	same	D17.3	011	10001	100011_1100	100011_0011	same
D18.2	010	10010	010011_0101	010011_0101	same	D18.3	011	10010	010011_1100	010011_0011	same
D19.2	010	10011	110010_0101	110010_0101	same	D19.3	011	10011	110010_1100	110010_0011	same
D20.2	010	10100	001011_0101	001011_0101	same	D20.3	011	10100	001011_1100	001011_0011	same
D21.2	010	10101	101010_0101	101010_0101	same	D21.3	011	10101	101010_1100	101010_0011	same
D22.2	010	10110	011010_0101	011010_0101	same	D22.3	011	10110	011010_1100	011010_0011	same
D23.2	010	10111	111010_0101	000101_0101	flip	D23.3	011	10111	111010_0011	000101_1100	flip
D24.2	010	11000	110011_0101	001100_0101	flip	D24.3	011	11000	110011_0011	001100_1100	flip
D25.2	010	11001	100110_0101	100110_0101	same	D25.3	011	11001	100110_1100	100110_0011	same
D26.2	010	11010	010110_0101	010110_0101	same	D26.3	011	11010	010110_1100	010110_0011	same
D27.2	010	11011	110110_0101	001001_0101	flip	D27.3	011	11011	110110_0011	001001_1100	flip
D28.2	010	11100	001110_0101	001110_0101	same	D28.3	011	11100	001110_1100	001110_0011	same
D29.2	010	11101	101110_0101	010001_0101	flip	D29.3	011	11101	101110_0011	010001_1100	flip
D30.2	010	11110	011110_0101	100001_0101	flip	D30.3	011	11110	011110_0011	100001_1100	flip
D31.2	010	11111	101011_0101	010100_0101	flip	D31.3	011	11111	101011_0011	010100_1100	flip

DX.Y	Y HGF	X EDCBA	CURRENT RD- abcdei_fghj	CURRENT RD+ abcdei_fghj	RD	DX.Y	Y HGF	X EDCBA	CURRENT RD- abcdei_fghj	CURRENT RD+ abcdei_fghj	RD
D0.4	100	00000	100111_0010	011000_1101	same	D0.5	101	00000	100111_1010	011000_1010	flip
D1.4	100	00001	011101_0010	100010_1101	same	D1.5	101	00001	011101_1010	100010_1010	flip
D2.4	100	00010	101101_0010	010010_1101	same	D2.5	101	00010	101101_1010	010010_1010	flip
D3.4	100	00011	110001_1101	110001_0010	flip	D3.5	101	00011	110001_1010	110001_1010	same
D4.4	100	00100	110101_0010	001010_1101	same	D4.5	101	00100	110101_1010	001010_1010	flip
D5.4	100	00101	101001_1101	101001_0010	flip	D5.5	101	00101	101001_1010	101001_1010	same
D6.4	100	00110	011001_1101	011001_0010	flip	D6.5	101	00110	011001_1010	011001_1010	same
D7.4	100	00111	111000_1101	000111_0010	flip	D7.5	101	00111	111000_1010	000111_1010	same
D8.4	100	01000	111001_0010	000110_1101	same	D8.5	101	01000	111001_1010	000110_1010	flip
D9.4	100	01001	100101_1101	100101_0010	flip	D9.5	101	01001	100101_1010	100101_1010	same
D10.4	100	01010	010101_1101	010101_0010	flip	D10.5	101	01010	010101_1010	010101_1010	same
D11.4	100	01011	110100_1101	110100_0010	flip	D11.5	101	01011	110100_1010	110100_1010	same
D12.4	100	01100	001101_1101	001101_0010	flip	D12.5	101	01100	001101_1010	001101_1010	same
D13.4	100	01101	101100_1101	101100_0010	flip	D13.5	101	01101	101100_1010	101100_1010	same
D14.4	100	01110	011100_1101	011100_0010	flip	D14.5	101	01110	011100_1010	011100_1010	same
D15.4	100	01111	010111_0010	101000_1101	same	D15.5	101	01111	010111_1010	101000_1010	flip
D16.4	100	10000	011011_0010	100100_1101	same	D16.5	101	10000	011011_1010	100100_1010	flip
D17.4	100	10001	100011_1101	100011_0010	flip	D17.5	101	10001	100011_1010	100011_1010	same
D18.4	100	10010	010011_1101	010011_0010	flip	D18.5	101	10010	010011_1010	010011_1010	same
D19.4	100	10011	110010_1101	110010_0010	flip	D19.5	101	10011	110010_1010	110010_1010	same
D20.4	100	10100	001011_1101	001011_0010	flip	D20.5	101	10100	001011_1010	001011_1010	same
D21.4	100	10101	101010_1101	101010_0010	flip	D21.5	101	10101	101010_1010	101010_1010	same
D22.4	100	10110	011010_1101	011010_0010	flip	D22.5	101	10110	011010_1010	011010_1010	same
D23.4	100	10111	111010_0010	000101_1101	same	D23.5	101	10111	111010_1010	000101_1010	flip
D24.4	100	11000	110011_0010	001100_1101	same	D24.5	101	11000	110011_1010	001100_1010	flip
D25.4	100	11001	100110_1101	100110_0010	flip	D25.5	101	11001	100110_1010	100110_1010	same
D26.4	100	11010	010110_1101	010110_0010	flip	D26.5	101	11010	010110_1010	010110_1010	same
D27.4	100	11011	110110_0010	001001_1101	same	D27.5	101	11011	110110_1010	001001_1010	flip
D28.4	100	11100	001110_1101	001110_0010	flip	D28.5	101	11100	001110_1010	001110_1010	same
D29.4	100	11101	101110_0010	010001_1101	same	D29.5	101	11101	101110_1010	010001_1010	flip
D30.4	100	11110	011110_0010	100001_1101	same	D30.5	101	11110	011110_1010	100001_1010	flip
D31.4	100	11111	101011_0010	010100_1101	same	D31.5	101	11111	101011_1010	010100_1010	flip

DX.Y	Y HGF	X EDCBA	CURRENT RD- abcdei_fghj	CURRENT RD+ abcdei_fghj	RD	DX.Y	Y HGF	X EDCBA	CURRENT RD- abcdei_fghj	CURRENT RD+ abcdei_fghj	RD
D0.6	110	00000	100111_0110	011000_0110	flip	D0.7	111	00000	100111_0001	011000_1110	same
D1.6	110	00001	011101_0110	100010_0110	flip	D1.7	111	00001	011101_0001	100010_1110	same
D2.6	110	00010	101101_0110	010010_0110	flip	D2.7	111	00010	101101_0001	010010_1110	same
D3.6	110	00011	110001_0110	110001_0110	same	D3.7	111	00011	110001_1110	110001_0001	flip
D4.6	110	00100	110101_0110	001010_0110	flip	D4.7	111	00100	110101_0001	001010_1110	same
D5.6	110	00101	101001_0110	101001_0110	same	D5.7	111	00101	101001_1110	101001_0001	flip
D6.6	110	00110	011001_0110	011001_0110	same	D6.7	111	00110	011001_1110	011001_0001	flip
D7.6	110	00111	111000_0110	000111_0110	same	D7.7	111	00111	111000_1110	000111_0001	flip
D8.6	110	01000	111001_0110	000110_0110	flip	D8.7	111	01000	111001_0001	000110_1110	same
D9.6	110	01001	100101_0110	100101_0110	same	D9.7	111	01001	100101_1110	100101_0001	flip
D10.6	110	01010	010101_0110	010101_0110	same	D10.7	111	01010	010101_1110	010101_0001	flip
D11.6	110	01011	110100_0110	110100_0110	same	D11.7	111	01011	110100_1110	110100_1000	flip
D12.6	110	01100	001101_0110	001101_0110	same	D12.7	111	01100	001101_1110	001101_0001	flip
D13.6	110	01101	101100_0110	101100_0110	same	D13.7	111	01101	101100_1110	101100_1000	flip
D14.6	110	01110	011100_0110	011100_0110	same	D14.7	111	01110	011100_1110	011100_1000	flip
D15.6	110	01111	010111_0110	101000_0110	flip	D15.7	111	01111	010111_0001	101000_1110	same
D16.6	110	10000	011011_0110	100100_0110	flip	D16.7	111	10000	011011_0001	100100_1110	same
D17.6	110	10001	100011_0110	100011_0110	same	D17.7	111	10001	100011_0111	100011_0001	flip
D18.6	110	10010	010011_0110	010011_0110	same	D18.7	111	10010	010011_0111	010011_0001	flip
D19.6	110	10011	110010_0110	110010_0110	same	D19.7	111	10011	110010_1110	110010_0001	flip
D20.6	110	10100	001011_0110	001011_0110	same	D20.7	111	10100	001011_0111	001011_0001	flip
D21.6	110	10101	101010_0110	101010_0110	same	D21.7	111	10101	101010_1110	101010_0001	flip
D22.6	110	10110	011010_0110	011010_0110	same	D22.7	111	10110	011010_1110	011010_0001	flip
D23.6	110	10111	111010_0110	000101_0110	flip	D23.7	111	10111	111010_0001	000101_1110	same
D24.6	110	11000	110011_0110	001100_0110	flip	D24.7	111	11000	110011_0001	001100_1110	same
D25.6	110	11001	100110_0110	100110_0110	same	D25.7	111	11001	100110_1110	100110_0001	flip
D26.6	110	11010	010110_0110	010110_0110	same	D26.7	111	11010	010110_1110	010110_0001	flip
D27.6	110	11011	110110_0110	001001_0110	flip	D27.7	111	11011	110110_0001	001001_1110	same
D28.6	110	11100	001110_0110	001110_0110	same	D28.7	111	11100	001110_1110	001110_0001	flip
D29.6	110	11101	101110_0110	010001_0110	flip	D29.7	111	11101	101110_0001	010001_1110	same
D30.6	110	11110	011110_0110	100001_0110	flip	D30.7	111	11110	011110_0001	100001_1110	same
D31.6	110	11111	101011_0110	010100_0110	flip	D31.7	111	11111	101011_0001	010100_1110	same

DX.Y	Y HGF	X EDCBA	CURRENT RD- abcdei_fghj	CURRENT RD+ abcdei_fghj	RD
K28.0	000	11100	001111_0100	110000_1011	same
K28.1	001	11100	001111_1001	110000_0110	flip
K28.2	010	11100	001111_0101	110000_1010	flip
K28.3	011	11100	001111_0011	110000_1100	flip
K28.4	100	11100	001111_0010	110000_1101	same
K28.5	101	11100	001111_1010	110000_0101	flip
K28.6	110	11100	001111_0110	110000_1001	flip
K28.7	111	11100	001111_1000	110000_0111	same
K23.7	111	10111	111010_1000	000101_0111	same
K27.7	111	11011	110110_1000	001001_0111	same
K29.7	111	11101	101110_1000	010001_0111	same
K30.7	111	11110	011110_1000	100001_0111	same