system binarny

|  |  |  |
| --- | --- | --- |
| 582642 **/** 2 = | 291321 | i reszta 0 |
| 291321 **/** 2 = | 145660 | i reszta 1 |
| 145660 **/** 2 = | 72830 | i reszta 0 |
| 72830/ 2 = | 36415 | i reszta 0 |
| 36415 **/** 2 = | 18207 | i reszta 1 |
| 18207 **/** 2 = | 9103 | i reszta 1 |
| 9103 **/** 2 = | 4551 | i reszta 1 |
| 4551 **/** 2 = | 2275 | i reszta 1 |
| 2275 **/** 2 = | 1137 | i reszta 1 |
| 1137 **/** 2 = | 568 | i reszta 1 |
| 568 **/** 2 = | 284 | i reszta 0 |
| 284 **/** 2 = | 142 | i reszta 0 |
| 142 **/** 2 = | 71 | i reszta 0 |
| 71 **/** 2 = | 35 | i reszta 1 |
| 35/ 2 = | 17 | i reszta 1 |
| 17**/**2 = | 8 | i reszta 1 |
| 8 **/** 2 = | 4 | i reszta 0 |
| 4 **/** 2 = | 2 | i reszta 0 |
| 2 **/** 2 = | 1 | i reszta 0 |
| 1 **/** 2 = | 0 | i reszta 1 - koniec, wynik odczytujemy w kierunku z dołu do góry |

582642(10) = 10001110001111110010(2)

System oktalny

Mamy znaleźć reprezentację liczby 10000 w systemie ósemkowym.

|  |  |  |  |
| --- | --- | --- | --- |
| 10000 | : 8 = | 1250, | reszta 0 |
| 1250 | : 8 = | 156, | reszta 2 |
| 156 | : 8 = | 19, | reszta 4 |
| 19 | : 8 = | 2 | reszta 3 |
| 2 | : 8 = | 0 | reszta 2 |

 10000 = 234208

System szesnastkowy

Mamy znaleźć reprezentację liczby 99999 w systemie szesnastkowym.

|  |  |  |  |
| --- | --- | --- | --- |
| 99999 | : 16 = | 6249, | reszta 15 - cyfra F |
| 6249 | : 16 = | 390, | reszta 9 |
| 390 | : 16 = | 24, | reszta 6 |
| 24 | : 16 = | 1. | reszta 8 |
| 1 | : 16 = | 0, | reszta 1 |

 99999 = 1869F16

|  |  |  |
| --- | --- | --- |
| 1 2 3 4 5 6 7 8 9 10 | // modify basefield  #include <iostream> // std::cout, std::dec, std::hex, std::oct  int main () {  int n = 70;  std::cout << std::dec << n << '\n';  std::cout << std::hex << n << '\n';  std::cout << std::oct << n << '\n';  return 0;  } |  |

Output:

|  |
| --- |
| 70  46  106 |