Лабораторна робота №1

Учня 1 курсу Мацкевича Романа

Факультет-ФІКТ(ІПЗ 20-2)

**Завдання 1:** Заповнити таблицю степенів двійки.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **2^x** | 2^0 | 2^1 | 2^2 | 2^3 | 2^4 | 2^5 | 2^6 | 2^7 | 2^8 | 2^9 | 2^10 |
| **Значення** | 1 | 2 | 4 | 8 | 16 | 32 | 64 | 128 | 256 | 512 | 1024 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **2^x** | 2^11 | 2^12 | 2^13 | 2^14 | 2^15 | 2^16 |
| **Значення** | 2048 | 4096 | 8192 | 16384 | 32768 | 65536 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 2^17 | 2^18 | 2^19 | 2^20 | 2^21 |
| 131072 | 262144 | 524288 | 1048576 | 2097152 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Значення** | **2^x,x=** | **4^x,x=** | **8^x,x=** | **16^x,x=** |
| **1** | 0 | 0 | 0 | 0 |
| **2** | 1 | - | - | - |
| **4** | 2 | 1 | - | - |
| **8** | 3 | - | 1 | - |
| **16** | 4 | 2 | - | 1 |
| **32** | 5 | - | - | - |
| **64** | 6 | 3 | 2 | - |
| **128** | 7 | - | - | - |
| **256** | 8 | 4 | - | 2 |
| **512** | 9 | - | 3 | - |
| **1024** | 10 | 5 | - | - |
| **2048** | 11 | - | - | - |
| **4096** | 12 | 6 | 4 | 3 |
| **8192** | 13 | - | - | - |
| **16384** | 14 | 7 | - | - |
| **32768** | 15 | - | 5 | - |
| **65536** | 16 | 8 | - | 4 |
| **131072** | 17 | - | - | - |
| **262144** | 18 | 9 | 6 | - |
| **524288** | 19 | - | - | - |
| **1048576** | 20 | 10 | - | 5 |

**43|**\_**2**

**42 21|**\_**2**

1. **20 10|**\_2
2. **10 5|**\_2

**0 4 2|**\_2

**1 2 1|**\_2

1. **1 4310=1010112**

**1 40372=111111000101**

**4310=11В16 01111111112=3FE16**

**4310=0FC516 111112=1F16**

**D645A16=110101100100010110102**

**1111110=3110 01111111112=102210**

**987C6A569816=1001100001111100011010100101011010011000**