Мирзаитов Тимур Поток 3.1 Вариант 47

Домашняя работа №3

A=38, B=78

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 |

A

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 |

B

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A>0, B>0 | | | | | | | | | | | Интерпретации | | | | |
|  | | | | | | | | | | | Знаковая | | | Без знаковая | |
| Aпр | 0 | 0 | 1 | | 0 | 0 | 1 | 1 | | 0 | 38 | | | 38 | |
| Bпр | 0 | 1 | 0 | | 0 | 1 | 1 | 1 | | 0 | 78 | | | 78 | |
| Cдоп | 1 | 1 | 0 | | 1 | 1 | 0 | 0 | | 0 |  | | | ?216 | |
| Cпр | 1 | 0 | 1 | | 0 | 1 | 0 | 0 | | 0 | -40 | | |  | |
| CF=1 | | | | ZF=0 | | | | | PF=1 | | | AF=1 | SF=1 | | OF=0 |

Для без знаковой интерпретации результат неверен вследствие возникающего заёма из разряда за пределами формата

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A<0, B>0 | | | | | | | | | | | Интерпретации | | | | |
|  | | | | | | | | | | | Знаковая | | | Без знаковая | |
| Aдоп | 1 | 1 | 0 | | 1 | 1 | 0 | 1 | | 0 | -38 | | | 218 | |
| Bпр | 0 | 1 | 0 | | 0 | 1 | 1 | 1 | | 0 | 78 | | | 78 | |
| Cдоп | 1 | 0 | 0 | | 0 | 1 | 1 | 0 | | 0 |  | | | 216 | |
| Cпр | 1 | 1 | 1 | | 1 | 0 | 1 | 0 | | 0 | -116 | | |  | |
| CF=0 | | | | ZF=0 | | | | | PF=1 | | | AF=1 | SF=1 | | OF=0 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A>0, B<0 | | | | | | | | | | | Интерпретации | | | | |
|  | | | | | | | | | | | Знаковая | | | Без знаковая | |
| Aпр | 0 | 0 | 1 | | 0 | 0 | 1 | 1 | | 0 | 38 | | | 38 | |
| Bдоп | 1 | 0 | 1 | | 1 | 0 | 0 | 1 | | 0 | -78 | | | 178 | |
| Cпр | 0 | 1 | 1 | | 1 | 0 | 1 | 0 | | 0 | 116 | | | ?116 | |
| CF=1 | | | | ZF=0 | | | | | PF=1 | | | AF=0 | SF=0 | | OF=0 |

Для БзИ результат неверен вследствие возникающего заёма из разряда за пределами формата.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A<0, B<0 | | | | | | | | | | | Интерпретации | | | | |
|  | | | | | | | | | | | Знаковая | | | Без знаковая | |
| Aдоп | 1 | 1 | 0 | | 1 | 1 | 0 | 1 | | 0 | -38 | | | 218 | |
| Bдоп | 1 | 0 | 1 | | 1 | 0 | 0 | 1 | | 0 | -78 | | | 178 | |
| Cпр | 0 | 0 | 1 | | 0 | 1 | 0 | 0 | | 0 | 40 | | | 40 | |
| CF=0 | | | | ZF=0 | | | | | PF=1 | | | AF=0 | SF=0 | | OF=0 |

2) Правило для подбора выглядит следующим образом:

A + B > 128, значит 90 < В < 127

A = 38(неизменно) B = 100(подбирём)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 |

A

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 |

B

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A<0, B>0 | | | | | | | | | | | Интерпретации | | | | |
|  | | | | | | | | | | | Знаковая | | | Без знаковая | |
| Aдоп | 1 | 1 | 0 | | 1 | 1 | 0 | 1 | | 0 | -38 | | | 218 | |
| Bпр | 0 | 1 | 1 | | 0 | 0 | 1 | 0 | | 0 | 100 | | | 100 | |
| Cпр | 0 | 1 | 1 | | 1 | 0 | 1 | 1 | | 0 | ?118 | | | 118 | |
| CF=0 | | | | ZF=0 | | | | | PF=0 | | | AF=0 | SF=0 | | OF=1 |

Для ЗнИ результат неверен вследствие возникающего переполнения

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A>0, B<0 | | | | | | | | | | | Интерпретации | | | | |
|  | | | | | | | | | | | Знаковая | | | Без знаковая | |
| Aпр | 0 | 0 | 1 | | 0 | 0 | 1 | 1 | | 0 | 38 | | | 38 | |
| Bдоп | 1 | 0 | 0 | | 1 | 1 | 1 | 0 | | 0 | -100 | | | 156 | |
| Cдоп | 1 | 0 | 0 | | 0 | 1 | 0 | 1 | | 0 |  | | | ?138 | |
| Cпр | 1 | 1 | 1 | | 1 | 0 | 1 | 1 | | 0 | ?-118 | | |  | |
| CF=1 | | | | ZF=0 | | | | | PF=0 | | | AF=1 | SF=1 | | OF=1 |

Для ЗнИ результат неверен вследствие возникающего переполнения. Для БзИ результат неверен вследствие возникающего заёма из разряда за пределами формата.

3) Значение числа *В* фиксируем *(В* = 78), а значение *А* подбираем согласно формуле *А + В* = 128, благодаря которой при вычитании из положительного числа отрицательного будет фиксироваться переполнение, а при вычитании из отрицательного числа положительного не будет. Тогда *А* = 50.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A<0, B>0 | | | | | | | | | | Интерпретации | | | | |
|  | | | | | | | | | | Знаковая | | | Без знаковая | |
| Aдоп | 1 | 1 | 0 | | 0 | 1 | 1 | 1 | 0 | -50 | | | 206 | |
| Bпр | 0 | 1 | 0 | | 0 | 1 | 1 | 1 | 0 | 78 | | | 78 | |
| C | 1 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | -128 | | | 128 | |
| CF=0 | | | | ZF=0 | | | | | PF=0 | | AF=0 | SF=1 | | OF=0 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A>0, B<0 | | | | | | | | | | Интерпретации | | | | |
|  | | | | | | | | | | Знаковая | | | Без знаковая | |
| Aпр | 0 | 0 | 1 | | 1 | 0 | 0 | 1 | 0 | 50 | | | 50 | |
| Bдоп | 1 | 0 | 1 | | 1 | 0 | 0 | 1 | 0 | -78 | | | 178 | |
| C | 1 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | -128 | | | 128 | |
| CF=1 | | | | ZF=0 | | | | | PF=0 | | AF=0 | SF=1 | | OF=1 |

Результат без знаковой интерпретации некорректен вследствие возникающего заёма из разряда за пределами формата, для знаковой интерпретации результат некорректен из-за переполнения.