**N(floats)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | | | 1 | | | 2 | | | 3 | | | 4 | | | 5 | | | 6 | | | 7 | | |
| **0** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** | **16** | **17** | **18** | **19** | **20** | **21** | **22** | **23** |

**Grid**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |
|  | **0,0** | **1,0** | **2,0** | **…** | **blockIdx.x, 0** |  |
|  |  |  |  |  |  |  |
|  | **0,1** | **1,1** | **2,1** | **…** | **blockIdx.x, 1** |  |
|  |  |  |  |  |  |  |
|  | **0,2** | **1,2** | **2,2** | **…** | **blockIdx.x, 2** |  |
|  |  |  | **…** |  |  |  |
|  | **0, blockIdx.y** | **1, blockIdx.y** | **2, blockIdx.y** | **…** | **gridDim.x, gridDim.y** |  |
|  |  |  |  |  |  |  |

**Block**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |
|  | **0,0** | **1,0** | **2,0** | **…** | **threadIdx.x, 0** |  |
|  |  |  |  |  |  |  |
|  | **0,1** | **1,1** | **2,1** | **…** | **threadIdx.x, 1** |  |
|  |  |  |  |  |  |  |
|  | **0,2** | **1,2** | **2,2** | **…** | **threadIdx.x, 2** |  |
|  |  |  | **…** |  |  |  |
|  | **0,** **threadIdx.y** | **1,**  **threadIdx.y** | **2,**  **threadIdx.y** | **…** | **blockDim .x,**   **blockDim .y** |  |
|  |  |  |  |  |  |  |

N Block 0,0

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **0** | | | **1** | | | **2** | | | **3** | | | **4** | | | **5** | | | **6** | | | **7** | | |
| **0** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** | **16** | **17** | **18** | **19** | **20** | **21** | **22** | **23** |
| **8** | | | **9** | | | **10** | | | **11** | | | **12** | | | **13** | | | **14** | | | **15** | | |
| **24** | **25** | **26** | **27** | **28** | **29** | **30** | **31** | **32** | **33** | **34** | **35** | **36** | **37** | **38** | **39** | **40** | **41** | **42** | **43** | **44** | **45** | **46** | **47** |
| **16** | | | **17** | | | **18** | | | **19** | | | **20** | | | **21** | | | **22** | | | **23** | | |
| **48** | **49** | **50** | **51** | **52** | **53** | **54** | **55** | **56** | **57** | **58** | **59** | **60** | **61** | **62** | **63** | **64** | **65** | **66** | **67** | **68** | **69** | **70** | **71** |
| **24** | | | **25** | | | **26** | | | **27** | | | **28** | | | **29** | | | **30** | | | **31** | | |
| **72** | **73** | **74** | **75** | **76** | **77** | **78** | **79** | **80** | **81** | **82** | **83** | **84** | **85** | **86** | **87** | **88** | **89** | **90** | **91** | **92** | **93** | **94** | **95** |
| **32** | | | **33** | | | **34** | | | **35** | | | **36** | | | **37** | | | **38** | | | **39** | | |
| **96** | **97** | **98** | **99** | **100** | **101** | **102** | **103** | **104** | **105** | **106** | **107** | **108** | **109** | **110** | **112** | **113** | **114** | **115** | **116** | **117** | **118** | **119** | **120** |
| **40** | | | **41** | | | **42** | | | **43** | | | **44** | | | **45** | | | **46** | | | **47** | | |
| **121** | **122** | **123** | **124** | **125** | **126** | **127** | **128** | **129** | **130** | **131** | **132** | **133** | **134** | **135** | **136** | **137** | **138** | **139** | **140** | **141** | **142** | **143** | **144** |
| **48** | | | **49** | | | **50** | | | **51** | | | **52** | | | **53** | | | **54** | | | **55** | | |
| **145** | **146** | **147** | **148** | **149** | **150** | **151** | **152** | **153** | **154** | **155** | **156** | **157** | **158** | **159** | **160** | **161** | **162** | **163** | **164** | **165** | **166** | **167** | **168** |
| **56** | | | **57** | | | **58** | | | **59** | | | **60** | | | **61** | | | **62** | | | **63** | | |
| **169** | **170** | **171** | **172** | **173** | **174** | **175** | **176** | **177** | **178** | **179** | **180** | **181** | **182** | **183** | **184** | **185** | **186** | **187** | **188** | **190** | **191** | **192** | **193** |

1\*4+0, 1\*4\*3+0 = [4, 12]

1\*4+0, 1\*4\*3+1\*3 = [4, 15]

Block 1,1