Q1

obelix.gaul.csd.uwo.ca[62]% gcc -lm -o prog1 prog1.c

obelix.gaul.csd.uwo.ca[63]% ./prog1

Please enter a positive integer to compute: 10

After 10 times compute, the value of Pi = 3.200000e+00

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obelix.gaul.csd.uwo.ca[64]% ./prog1

Please enter a positive integer to compute: 100

After 100 times compute, the value of Pi = 3.040000e+00

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obelix.gaul.csd.uwo.ca[65]% ./prog1

Please enter a positive integer to compute: 1000

After 1000 times compute, the value of Pi = 3.176000e+00

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obelix.gaul.csd.uwo.ca[66]% ./prog1

Please enter a positive integer to compute: 100000

After 100000 times compute, the value of Pi = 3.142520e+00

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obelix.gaul.csd.uwo.ca[67]% ./prog1

Please enter a positive integer to compute: 1000000

After 1000000 times compute, the value of Pi = 3.143368e+00

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obelix.gaul.csd.uwo.ca[68]% ./prog1

Please enter a positive integer to compute: 10000000

After 10000000 times compute, the value of Pi = 3.142621e+00

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obelix.gaul.csd.uwo.ca[69]% ./prog1

Please enter a positive integer to compute: 100000000

After 100000000 times compute, the value of Pi = 3.141299e+00

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Q2

obelix.gaul.csd.uwo.ca[15]% gcc -o prog2 prog2.c

obelix.gaul.csd.uwo.ca[16]% ./prog2

Enter size of magic square: 1

1

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obelix.gaul.csd.uwo.ca[17]% ./prog2

Enter size of magic square: 3

8 1 6

3 5 7

4 9 2

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obelix.gaul.csd.uwo.ca[18]% ./prog2

Enter size of magic square: 4

Invalid input. Please input an odd integer between 1 and 13: 5

17 24 1 8 15

23 5 7 14 16

4 6 13 20 22

10 12 19 21 3

11 18 25 2 9

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obelix.gaul.csd.uwo.ca[19]% ./prog2

Enter size of magic square: 11

68 81 94 107 120 1 14 27 40 53 66

80 93 106 119 11 13 26 39 52 65 67

92 105 118 10 12 25 38 51 64 77 79

104 117 9 22 24 37 50 63 76 78 91

116 8 21 23 36 49 62 75 88 90 103

7 20 33 35 48 61 74 87 89 102 115

19 32 34 47 60 73 86 99 101 114 6

31 44 46 59 72 85 98 100 113 5 18

43 45 58 71 84 97 110 112 4 17 30

55 57 70 83 96 109 111 3 16 29 42

56 69 82 95 108 121 2 15 28 41 54

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obelix.gaul.csd.uwo.ca[20]% ./prog2

Enter size of magic square: 13

93 108 123 138 153 168 1 16 31 46 61 76 91

107 122 137 152 167 13 15 30 45 60 75 90 92

121 136 151 166 12 14 29 44 59 74 89 104 106

135 150 165 11 26 28 43 58 73 88 103 105 120

149 164 10 25 27 42 57 72 87 102 117 119 134

163 9 24 39 41 56 71 86 101 116 118 133 148

8 23 38 40 55 70 85 100 115 130 132 147 162

22 37 52 54 69 84 99 114 129 131 146 161 7

36 51 53 68 83 98 113 128 143 145 160 6 21

50 65 67 82 97 112 127 142 144 159 5 20 35

64 66 81 96 111 126 141 156 158 4 19 34 49

78 80 95 110 125 140 155 157 3 18 33 48 63

79 94 109 124 139 154 169 2 17 32 47 62 77

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Q3

obelix.gaul.csd.uwo.ca[15]% gcc -o prog3 prog3.c

obelix.gaul.csd.uwo.ca[16]% ./prog3

Enter a dollar amount: 20

$20 bills: 1

$10 bills: 0

$5 bills: 0

$2 bills: 0

$1 bills: 0

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obelix.gaul.csd.uwo.ca[17]% ./prog3

Enter a dollar amount: 2305

$20 bills: 115

$10 bills: 0

$5 bills: 1

$2 bills: 0

$1 bills: 0

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obelix.gaul.csd.uwo.ca[18]% ./prog3

Enter a dollar amount: 3963

$20 bills: 198

$10 bills: 0

$5 bills: 0

$2 bills: 1

$1 bills: 1

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obelix.gaul.csd.uwo.ca[19]% ./prog3

Enter a dollar amount: 304850

$20 bills: 15242

$10 bills: 1

$5 bills: 0

$2 bills: 0

$1 bills: 0

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obelix.gaul.csd.uwo.ca[20]% ./prog3

Enter a dollar amount: 423443333

$20 bills: 21172166

$10 bills: 1

$5 bills: 0

$2 bills: 1

$1 bills: 1

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obelix.gaul.csd.uwo.ca[22]% ./prog3

Enter a dollar amount: 15

$20 bills: 0

$10 bills: 1

$5 bills: 1

$2 bills: 0

$1 bills: 0

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obelix.gaul.csd.uwo.ca[23]% ./prog3

Enter a dollar amount: 1999

$20 bills: 99

$10 bills: 1

$5 bills: 1

$2 bills: 2

$1 bills: 0

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obelix.gaul.csd.uwo.ca[24]% ./prog3

Enter a dollar amount: 29998

$20 bills: 1499

$10 bills: 1

$5 bills: 1

$2 bills: 1

$1 bills: 1

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obelix.gaul.csd.uwo.ca[25]% ./prog3

Enter a dollar amount: 99999

$20 bills: 4999

$10 bills: 1

$5 bills: 1

$2 bills: 2

$1 bills: 0