





















**Table 7: Tufts Checksum Corpus Example Parameters. For example 10 two solutions were reported by forum posters.**

ID	mStart	mEnd	mCheck	foldOp	finalOp	Width	Checksum Algorithm	Samples	Results
1	1	-1	21	sub	None	8	(lambda (xs) (fold subtraction xs 0))	25	104
2	0	-4	28	add	None	8	(lambda (xs) (fold addition xs 0))	252	161
3	3	-1	12	add	(add, 0x1a)	8	(lambda (xs) (addition (fold addition xs 0) 0x1a))	75	8
4	0	-1	-1	add	(xor, 0x55)	8	(lambda (xs) (xor (fold addition xs 0) 0x55))	32	2
5	0	-1	-1	add	(add, 0xa5)	8	(lambda (xs) (addition (fold addition xs 0) 0xa5))	8	2
6	2	-1	10	add	None	8	(lambda (xs) (fold addition xs 0))	25	22
7	0	-1	-1	sub	None	8	(lambda (xs) (fold subtraction xs 0))	38	64
8	0	-1	12	add	(xor, 0x55)	8	(lambda (xs) (xor (fold addition xs 0) 0x55))	12	6
9	0	0	1	Ones Comp	invert	16	(lambda (xs) (invert (fold onesComplement xs 0)))	7	20
10 (a)	0	-2	14	add	None	16	(lambda (xs) (fold addition xs 0))	14	13
10 (b)	14	-1	15	sub	(add,0xFF2)	16	(lambda (xs) (addition (fold subtraction xs 0) 0xFF2))	-	-
11 (IPv4 Header)	0	0	5	Ones Comp	Invert	16	(lambda (xs) (invert (fold onesComplement xs 0)))	7	24
12 (ICMP)	0	0	1	Ones Comp	Invert	16	(lambda (xs) (invert (fold onesComplement xs 0)))	10	48

**Listing 9: Example 6**

```

1 55549D1748C2AA148102FF
2 55549D1748C2AA1D8E0417
3 55549D1748C2AA286502F7
    
```

```

3 08008239A41700015EAB245D0004639E08090A0B0C0D0E0F101112131
4 15161718191A1B1C1D1E1F202122232425262728292A2B2C2D2E2F30
3 1323334353637
    
```

**Listing 10: Example 7**

```

1 00010302D20226
2 2001030A410000024A0030895BA73
3 20010312D140200100002101000022010000230100002F
4 20010302D240C8
    
```

**Listing 11: Example 8**

```

1 A80200000001E5D0000000070
2 A80300000004055D0000000044
3 A81200004004159A00000000F8
4 A85200084000149C00000000A7
    
```

**Listing 12: Example 9**

```

1 D00771BCBE3B0000
2 0B00396CBE3B05007E5246436172644F6E
3 D0073532BE3B07007E4465766963654E616D653D544138313000
4 D0074ED4E1230000
    
```

**Listing 13: Example 10**

```

1 FFFFFFFF01671F84000000000000000000000000000000000000000000000101002
1EAD08
2 3065C00000000000000000000000000000000000000000000006F85000101006
0EB9F07
3 FFFFFFFF01671F8C000000000000000000000000000000000000000000000101002
1F2DE00
    
```

**Listing 14: Example 11**

```

1 4500002894D00000710654CC0D6B8809C0A80A17
2 450000282BA700007106BDF50D6B8809C0A80A17
3 45000028BD27000071062C750D6B8809C0A80A17
4 4500012C000040004006D998C0A80A170D6B8809
5 45000052000040004006DA72C0A80A170D6B8809
    
```

**Listing 15: Example 12**

```

1 08009654A41700005EAB245C00044F8508090A0B0C0D0E0F101112131
415161718191A1B1C1D1E1F202122232425262728292A2B2C2D2E2F30
31323334353637
2 00009E54A41700005EAB245C00044F8508090A0B0C0D0E0F101112131
415161718191A1B1C1D1E1F202122232425262728292A2B2C2D2E2F30
31323334353637
    
```