Integer, Hexadecimal, and Binary Representations of all Bytes

As we mentioned in the lab, each byte in a bytestring contains 8 bits, which can represent a single integer in the range 0-255. The table below shows each possible byte in all three of these representations, as well as the ASCII character represented by that byte (if one exists):

Integer	Hexadecimal	Binary	ASCII Character
0	0	00000000	
1	1	00000001	
2	2	00000010	
3	3	00000011	
4	4	00000100	
5	5	00000101	
6	6	00000110	
7	7	00000111	
8	8	00001000	
9	9	00001001	
10	A	00001010	
11	B	00001011	
12	C	00001100	
13	D	00001101	
14	E	00001110	
15	F	00001111	
16	10	00010000	
17	11	00010001	
18	12	00010010	
19	13	00010011	
20	14	00010100	
21	15	00010101	
22	16	00010110	
23	17	00010111	
24	18	00011000	
25	19	00011001	
26	1A	00011010	
27	1B	00011011	

28	1C	00011100	
29	1D	00011101	
30	1E	00011110	
31	1F	00011111	
32	20	00100000	
33	21	00100001	!
34	22	00100010	"
35	23	00100011	#
36	24	00100100	$
37	25	00100101	%
38	26	00100110	&
39	27	00100111	'
40	28	00101000	(
41	29	00101001	)
42	2A	00101010	*
43	2B	00101011	+
44	2C	00101100	,
45	2D	00101101	-
46	2E	00101110	.
47	2F	00101111	/
48	30	00110000	0
49	31	00110001	1
50	32	00110010	2
51	33	00110011	3
52	34	00110100	4
53	35	00110101	5
54	36	00110110	6
55	37	00110111	7
56	38	00111000	8
57	39	00111001	9
58	3A	00111010	:
59	3B	00111011	;
60	3C	00111100	<
61	3D	00111101	=
62	3E	00111110	>
63	3F	00111111	?
64	40	01000000	@
65	41	01000001	A
66	42	01000010	B
67	43	01000011	C

68	44	01000100	D
69	45	01000101	E
70	46	01000110	F
71	47	01000111	G
72	48	01001000	H
73	49	01001001	I
74	4A	01001010	J
75	4B	01001011	K
76	4C	01001100	L
77	4D	01001101	M
78	4E	01001110	N
79	4F	01001111	O
80	50	01010000	P
81	51	01010001	Q
82	52	01010010	R
83	53	01010011	S
84	54	01010100	T
85	55	01010101	U
86	56	01010110	V
87	57	01010111	W
88	58	01011000	X
89	59	01011001	Y
90	5A	01011010	Z
91	5B	01011011	[
92	5C	01011100	\
93	5D	01011101	]
94	5E	01011110	^
95	5F	01011111	_
96	60	01100000	`
97	61	01100001	a
98	62	01100010	b
99	63	01100011	c
100	64	01100100	d
101	65	01100101	e
102	66	01100110	f
103	67	01100111	g
104	68	01101000	h
105	69	01101001	i
106	6A	01101010	j
107	6B	01101011	k

108	6C	01101100	l
109	6D	01101101	m
110	6E	01101110	n
111	6F	01101111	o
112	70	01110000	p
113	71	01110001	q
114	72	01110010	r
115	73	01110011	s
116	74	01110100	t
117	75	01110101	u
118	76	01110110	v
119	77	01110111	w
120	78	01111000	x
121	79	01111001	y
122	7A	01111010	z
123	7B	01111011	{
124	7C	01111100		
125	7D	01111101	}
126	7E	01111110	~
127	7F	01111111	
128	80	10000000	
129	81	10000001	
130	82	10000010	
131	83	10000011	
132	84	10000100	
133	85	10000101	
134	86	10000110	
135	87	10000111	
136	88	10001000	
137	89	10001001	
138	8A	10001010	
139	8B	10001011	
140	8C	10001100	
141	8D	10001101	
142	8E	10001110	
143	8F	10001111	
144	90	10010000	
145	91	10010001	
146	92	10010010	
147	93	10010011	

148	94	10010100	
149	95	10010101	
150	96	10010110	
151	97	10010111	
152	98	10011000	
153	99	10011001	
154	9A	10011010	
155	9B	10011011	
156	9C	10011100	
157	9D	10011101	
158	9E	10011110	
159	9F	10011111	
160	A0	10100000	
161	A1	10100001	
162	A2	10100010	
163	A3	10100011	
164	A4	10100100	
165	A5	10100101	
166	A6	10100110	
167	A7	10100111	
168	A8	10101000	
169	A9	10101001	
170	AA	10101010	
171	AB	10101011	
172	AC	10101100	
173	AD	10101101	
174	AE	10101110	
175	AF	10101111	
176	B0	10110000	
177	B1	10110001	
178	B2	10110010	
179	B3	10110011	
180	B4	10110100	
181	B5	10110101	
182	B6	10110110	
183	B7	10110111	
184	B8	10111000	
185	B9	10111001	
186	BA	10111010	
187	BB	10111011	

188	BC	10111100	
189	BD	10111101	
190	BE	10111110	
191	BF	10111111	
192	C0	11000000	
193	C1	11000001	
194	C2	11000010	
195	C3	11000011	
196	C4	11000100	
197	C5	11000101	
198	C6	11000110	
199	C7	11000111	
200	C8	11001000	
201	C9	11001001	
202	CA	11001010	
203	CB	11001011	
204	CC	11001100	
205	CD	11001101	
206	CE	11001110	
207	CF	11001111	
208	D0	11010000	
209	D1	11010001	
210	D2	11010010	
211	D3	11010011	
212	D4	11010100	
213	D5	11010101	
214	D6	11010110	
215	D7	11010111	
216	D8	11011000	
217	D9	11011001	
218	DA	11011010	
219	DB	11011011	
220	DC	11011100	
221	DD	11011101	
222	DE	11011110	
223	DF	11011111	
224	E0	11100000	
225	E1	11100001	
226	E2	11100010	
227	E3	11100011	

228	E4	11100100	
229	E5	11100101	
230	E6	11100110	
231	E7	11100111	
232	E8	11101000	
233	E9	11101001	
234	EA	11101010	
235	EB	11101011	
236	EC	11101100	
237	ED	11101101	
238	EE	11101110	
239	EF	11101111	
240	F0	11110000	
241	F1	11110001	
242	F2	11110010	
243	F3	11110011	
244	F4	11110100	
245	F5	11110101	
246	F6	11110110	
247	F7	11110111	
248	F8	11111000	
249	F9	11111001	
250	FA	11111010	
251	FB	11111011	
252	FC	11111100	
253	FD	11111101	
254	FE	11111110	
255	FF	11111111	