

BRIEF

CHALLENGE:

Agents at INTERPOL have intercepted several email messages sent to one of the world's most wanted criminals. The messages are encoded. Your help is needed to decode them. To do this you will need to translate them from Hexadecimal, Decimal and Binary numbers to ASCII text.

STEP 1: Learn more about how to do this in the interactive **Online Discovery Brief**.

STEP 2: Go to the **Investigate Folder** to find the messages you will decode. Keep a record of the answers.

STEP 3: After you've completed the challenges head to the **Online CTF Scorecard** and enter your answers to collect flags and ascend Mt. Tenacious.

STEP 1 - DISCOVER

Review the interactive **Online Discovery Brief** to learn about:

- Number Systems – Decimal, Binary, and Hexadecimal
- ASCII and Converting Numbers to Characters
- How to use the Scratchpad in the Challenge Folder to help with deciphering the messages

Complete the **Online Discovery Brief** by learning critical information about the SideQuest and testing your knowledge through Brain Flexes. Once you have completed this go to the **INVESTIGATE FOLDER**.

ABOUT INTERPOL

The International Criminal Police Organization, commonly known as INTERPOL, is an international organization that facilitates worldwide police cooperation and crime control.

Here is a link to their website: <https://www.interpol.int/en>

STEP 2 - INVESTIGATE FOLDER

There are 5 messages in the challenge file. You will decipher each message using:

- the **Hexadecimal, Decimal or Binary Scratchpad** included in the Challenge File
- a **Conversion Chart** located on the last page.

Decipher the 5 messages to **find the answer to the questions** in the Scorecard on the next page.

To decode the message using the Conversion Chart:

- Identify whether the message uses Hexadecimal, Decimal or Binary numbers.
- Find each number in the Conversion Chart and determine its corresponding ASCII text letter, number or symbol.
- Using the **Scratchpad** below the image of the message, place the decoded ASCII text into the empty fillable boxes.

SIDEQUEST 0

The “**Clue to the Answer**” provides an idea of the number words and characters found in the answer.

While you are asked to decode the whole message, the goal is to decode enough of the message to answer the question.

STEP 3 - REPORT

- Keep track of the answers in **the Scorecard** on this page.
- Then enter these answers in the **Online CTF Scorecard** to collect flags for this SideQuest.
- Take a snapshot of the flags you have collected and turn it in for extra class credit.

SCORECARD

CHALLENGE	QUESTION	ANSWER
Challenge 1	How much is Igor offered to steal a painting?	
Challenge 2	Based on the map coordinates, what is the name of the museum they will rob?	
Challenge 3	What painting is Igor to steal?	
Challenge 4	Which train station will GZ meet Igor at after the robbery?	
Challenge 5	To get paid what country do Igor and GZ need to travel to?	

SIDEQUEST 0



CONVERSION CHART

Decimal / Binary / Hexadecimal / ASCII

DEC			+0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11	+12	+13	+14	+15
	BIN		_0000	_0001	_0010	_0011	_0100	_0101	_0110	_0111	_1000	_1001	_1010	_1011	_1100	_1101	_1110	_1111
	HEX		_0	_1	_2	_3	_4	_5	_6	_7	_8	_9	_A	_B	_C	_D	_E	_F
+0	0000_	0_	NUL	SOH	STX	ETX	EOT	ENQ	ACK	BEL	BS	HT	LF	VT	FF	CR	SO	SI
+16	0001_	1_	DLE	DC1	DC2	DC3	DC4	NAK	SYN	ETB	CAN	EM	SUB	ESC	FS	GS	RS	US
+32	0010_	2_	SPACE	!	"	#	\$	%	&	'	()	*	+	,	-	.	/
+48	0011_	3_	0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?
+64	0100_	4_	@	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
+80	0101_	5_	P	Q	R	S	T	U	V	W	X	Y	Z	[\]	^	_
+96	0110_	6_	`	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
+112	0111_	7_	p	q	r	s	t	u	v	w	x	y	z	{		}	~	DEL