Numbers

Chapter 2 - Ruby Basics

Numbers

Our first primary object

Numbers are used to perform math functions in your program.

Integers - Whole numbers and their negative counterparts

Floats - Floating-point numbers have decimal values
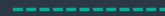
Number Examples

1. puts 13.0 + 10.0   = 23.0

2. puts 6 - 10   = -4

3. puts 11.0 / 2 = 5.5

4. puts 11 / 2 = 5

Letters

Chapter 3 - Ruby Basics

Letters

Dealing with text in Ruby

Text is dealt with in a special way in ruby

Character - A single letter or ASCII symbol

String - A group of characters

Dec	Hx	Oct	Char		Dec	Hx	Oct	Html	Chr	Dec	Hx	Oct	Html	Chr	Dec	Hx	Oct	Html	Chr
0	0	000	NUL	(null)	32	20	040	 	Space	64	40	100	@	@	96	60	140	`	`
1	1	001	SOH	(start of heading)	33	21	041	!	!	65	41	101	A	A	97	61	141	a	a
2	2	002	STX	(start of text)	34	22	042	"	"	66	42	102	B	B	98	62	142	b	b
3	3	003	ETX	(end of text)	35	23	043	#	#	67	43	103	C	C	99	63	143	c	c
4	4	004	EOT	(end of transmission)	36	24	044	$	$	68	44	104	D	D	100	64	144	d	d
5	5	005	ENQ	(enquiry)	37	25	045	%	%	69	45	105	E	E	101	65	145	e	e
6	6	006	ACK	(acknowledge)	38	26	046	&	&	70	46	106	F	F	102	66	146	f	f
7	7	007	BEL	(bell)	39	27	047	'	'	71	47	107	G	G	103	67	147	g	g
8	8	010	BS	(backspace)	40	28	050	(	(	72	48	110	H	H	104	68	150	h	h
9	9	011	TAB	(horizontal tab)	41	29	051	)	)	73	49	111	I	I	105	69	151	i	i
10	A	012	LF	(NL line feed, new line)	42	2A	052	*	*	74	4A	112	J	J	106	6A	152	j	j
11	B	013	VT	(vertical tab)	43	2B	053	+	+	75	4B	113	K	K	107	6B	153	k	k
12	C	014	FF	(NP form feed, new page)	44	2C	054	,	,	76	4C	114	L	L	108	6C	154	l	l
13	D	015	CR	(carriage return)	45	2D	055	-	-	77	4D	115	M	M	109	6D	155	m	m
14	E	016	SO	(shift out)	46	2E	056	.	.	78	4E	116	N	N	110	6E	156	n	n
15	F	017	SI	(shift in)	47	2F	057	/	/	79	4F	117	O	O	111	6F	157	o	o
16	10	020	DLE	(data link escape)	48	30	060	0	0	80	50	120	P	P	112	70	160	p	p
17	11	021	DC1	(device control 1)	49	31	061	1	1	81	51	121	Q	Q	113	71	161	q	q
18	12	022	DC2	(device control 2)	50	32	062	2	2	82	52	122	R	R	114	72	162	r	r
19	13	023	DC3	(device control 3)	51	33	063	3	3	83	53	123	S	S	115	73	163	s	s
20	14	024	DC4	(device control 4)	52	34	064	4	4	84	54	124	T	T	116	74	164	t	t
21	15	025	NAK	(negative acknowledge)	53	35	065	5	5	85	55	125	U	U	117	75	165	u	u
22	16	026	SYN	(synchronous idle)	54	36	066	6	6	86	56	126	V	V	118	76	166	v	v
23	17	027	ETB	(end of trans. block)	55	37	067	7	7	87	57	127	W	W	119	77	167	w	w
24	18	030	CAN	(cancel)	56	38	070	8	8	88	58	130	X	X	120	78	170	x	x
25	19	031	EM	(end of medium)	57	39	071	9	9	89	59	131	Y	Y	121	79	171	y	y
26	1A	032	SUB	(substitute)	58	3A	072	:	:	90	5A	132	Z	Z	122	7A	172	z	z
27	1B	033	ESC	(escape)	59	3B	073	;	;	91	5B	133	[	[	123	7B	173	{	{
28	1C	034	FS	(file separator)	60	3C	074	<	<	92	5C	134	\	\	124	7C	174	|		
29	1D	035	GS	(group separator)	61	3D	075	=	=	93	5D	135	]	]	125	7D	175	}	}
30	1E	036	RS	(record separator)	62	3E	076	>	>	94	5E	136	^	^	126	7E	176	~	~
31	1F	037	US	(unit separator)	63	3F	077	?	?	95	5F	137	_	_	127	7F	177	&#127;	DEL

String Arithmetic

String arithmetic is used to append or concatenate string objects. When this is done an new string is created from the strings that are added together.

String Examples

1. puts 'Frank' + 'Law' = FrankLaw

2. puts 'Zelda ' * 2 = Zelda Zelda

3. Is there a difference between '' and ' ' = Yes, one has a space and the other is called an empty string

4. puts 'Karen\'s Computer' = Karen's Computer

Understanding Git

Allowing multiple people to work on something seamlessly

Single Code line
All the code is in one place

Saved in the Cloud
If your work is pushed to the repository, it is now backed up and saved

Versioning
You are able to make changes to your code and then revert back to a previous version if you don't like what you did.

Shared
All of your changes can be shared with everyone with access to the repo

One Branch - Master

Rob Commits

Rob has now changed the master branch

Stiney Commits

At this point Stiney changes the master branch, but would have had to bring down Robs changes first.

Lou Commits

Mike Commits

Git Process for Now

Committing to Master

1) Stage your changes with the following command

```
git add -A
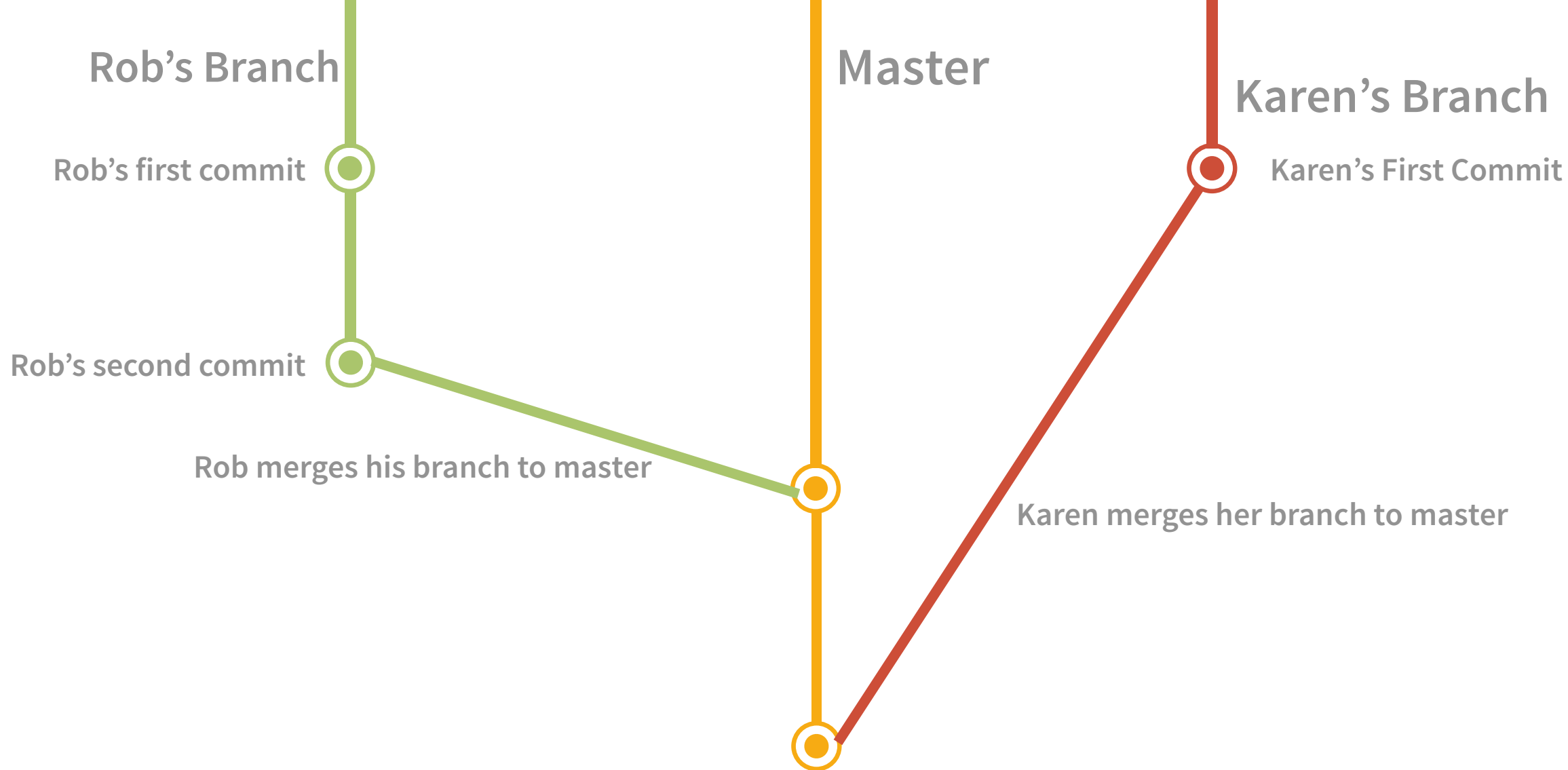```

2) Commit your changes to your local repository

```
git commit -m "PUT A MESSAGE ABOUT WHAT YOU ARE COMMITTING HERE"
```

3) Pull down any changes from anyone else so you have the latest

```
git pull origin master
```

4) Push your changes to the master branch

```
git push
```

General House Keeping

The stuff we are using

Slack

Please use it for all communications

Git

Used for version control

Notepad ++

Used to edit your program files

Ruby Command Line

Used to run and test your programs

Skitch

Used to take screenshots to send questions and post in Slack

GitGUI

Used as a Graphic Interface for Git, but prefer you learn the command line

Any Questions ???

WHAT **WHY** **WHERE** **WHEN** **WHO** **HOW**