CSCI 160 — Introduction to Problem-solving & Programming

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logistics

- instructor(s)
  - Jeremy Iverson (`jiverson002@csbsju.edu`)
  - PENGL 213, (320) 363-5542
  - office hours: T 10:00 - 11:00
                 W 14:00 - 15:00
- textbook
  - *Java Early Objects*, Lysecky and Lizarraga et al., zyBook
- website
  - `https://csbsju.instructure.com/courses/13506`
- labs
  - PENGL 218, TR 01A 09:30 - 10:25
                 02A 13:00 - 13:55

course objectives

- write well-designed Java programs for small-scale problems
- identify appropriate object classes for solving a given problem
- write good documentation for programs

course content

- introduction to Java
- using methods
- using objects
- decisions
- iterations
- arrays
- designing and implementing classes
- inheritance
- interfaces and polymorphism
- file i/o
- exceptions
- recursion
- searching
- sorting
- collections
- advanced topics

- Java - language
- Dr. Java - integrated development environment
- Linux - operating system
- Github - source code management platform
- Canvas - learning management system
- Outlook - calendar management application
- maybe others...

- attendance
- prelabs

- do your own work
- use each other as resources only

- three (3) lab quizzes (open book / note)
- two (2) in-class exams (closed book / note)
- one (1) in-class final exam (closed book / open note) [cumulative]

- stop by anytime
- my calendar

expectations

- prepare for class (do the reading!)
- participate in class
- be respectful

questions?

- upcoming assignment will be to schedule a 10 minute meeting with me in my office to handle introductions

Java program

- open Lecture1.java
- follow the instructions

ASCII Table

Dec	Hex	Oct	Char	Dec	Hex	Oct	Char	Dec	Hex	Oct	Char	Dec	Hex	Oct	Char
0	0	0		32	20	40	[space]	64	40	100	@	96	60	140	`
1	1	1		33	21	41	!	65	41	101	A	97	61	141	a
2	2	2		34	22	42	"	66	42	102	B	98	62	142	b
3	3	3		35	23	43	#	67	43	103	C	99	63	143	c
4	4	4		36	24	44	$	68	44	104	D	100	64	144	d
5	5	5		37	25	45	%	69	45	105	E	101	65	145	e
6	6	6		38	26	46	&	70	46	106	F	102	66	146	f
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9	9	11		41	29	51	)	73	49	111	I	105	69	151	i
10	A	12		42	2A	52	*	74	4A	112	J	106	6A	152	j
11	B	13		43	2B	53	+	75	4B	113	K	107	6B	153	k
12	C	14		44	2C	54	,	76	4C	114	L	108	6C	154	l
13	D	15		45	2D	55	-	77	4D	115	M	109	6D	155	m
14	E	16		46	2E	56	.	78	4E	116	N	110	6E	156	n
15	F	17		47	2F	57	/	79	4F	117	O	111	6F	157	o
16	10	20		48	30	60	0	80	50	120	P	112	70	160	p
17	11	21		49	31	61	1	81	51	121	Q	113	71	161	q
18	12	22		50	32	62	2	82	52	122	R	114	72	162	r
19	13	23		51	33	63	3	83	53	123	S	115	73	163	s
20	14	24		52	34	64	4	84	54	124	T	116	74	164	t
21	15	25		53	35	65	5	85	55	125	U	117	75	165	u
22	16	26		54	36	66	6	86	56	126	V	118	76	166	v
23	17	27		55	37	67	7	87	57	127	W	119	77	167	w
24	18	30		56	38	70	8	88	58	130	X	120	78	170	x
25	19	31		57	39	71	9	89	59	131	Y	121	79	171	y
26	1A	32		58	3A	72	:	90	5A	132	Z	122	7A	172	z
27	1B	33		59	3B	73	;	91	5B	133	[	123	7B	173	{
28	1C	34		60	3C	74	<	92	5C	134	\	124	7C	174	|
29	1D	35		61	3D	75	=	93	5D	135	]	125	7D	175	}
30	1E	36		62	3E	76	>	94	5E	136	^	126	7E	176	~
31	1F	37		63	3F	77	?	95	5F	137	_	127	7F	177	