

Problets Anyone? (problets.org)

Purpose: To learn programming concepts by solving problems

Topic	Sub-Topic	Used Since	No. Problems	Learning Objectives
Expressions	Arithmetic	Fall 2004	192	25
	Relational	Fall 2004	268	24
	Logical	Fall 2006	280	21
	Assignment	Fall 2008	255	19
	Bitwise	Fall 2010	303	28
Selection	If/if-else	Spring 2005	165	12
	switch	Spring 2010	147	12
Loops	while	Fall 2004	201	9
	for	Fall 2004	213	10
	do-while	Fall 2010	125	15
	Advanced	Spring 2010	139	13
Functions	Debugging	Fall 2009	117	9
	Tracing	Fall 2009	95	10
	Recursion	Spring 2013	68	10
Arrays	1-D	Fall 2010	172	14
Classes	Access	Spring 2013	128	18
Total			2868	249

Languages: C/C++/Java/C#

Types of Problems: Expression evaluation, Code-tracing, Debugging, Predicting code state

Features:

- Adapts to the learning needs of the user
- Provides step-by-step explanation of the correct solution

Benefits:

- Helps improve learning, e.g., [SIGCSE 05]
- Helps improve self-confidence of female students [SIGCSE 08]
- Helps improve the ability to write code [ITiCSE 13]

Semester	2008		2009		2010		2011		2012		2013	
	Fall	Spr	Fall	Spr	Fall	Spr	Fall	Spr	Fall	Spr.	Fall	
Adopters	19	33	27	33	31	29	37	37	35	31	51	
Uses	1446	3547	2488	2589	4739	5232	3274	3717	4390	5480	5691	

Logistics:

- Web-based: Used on student's own time and pace, as often as necessary
- Free for educational use

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SIGCSE 2014
Atlanta, GA, March 5-8, 2014

If you (or your colleagues) are interested in using problets, please fill out this form and return it to me. I will follow up by email and set up a web site for you. *Thank you.*

Name: _____

School: _____

Language(s) used: C++ / Java / C# / C

Do you want it set up for Spring 2014? Yes / No

- If so, date by which you want it set up: _____

Email: _____

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