

Foundations of Software Engineering

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4. Chapter: Foundations of Software Engineering

1. Foundations of Software Engineering Questions

4.1.1. Which line of the above code is both a definition and an initializa...

Author: Kevin Amaratunga

Which line of the above code is both a definition and an initialization?

Consider the following code:

```
extern int x; // Statement a
int main()
{
int a, b; // Statement b
double d = 9; // Statement c
a = 1; // Statement d
b = 5; // Statement e
cout << x+ a/b + d/10 << endl;
}
```

Please choose only one answer:

- Statement a
- Statement b
- Statement c
- Statement d
- Statement e

Check the answer of this question online at [QuizOver.com](http://www.quizover.com):

Question: [Which line of the above code is both a definition by Prof. Kevin](#)

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4.1.2. Which line of the above code declares a variable without allocating...

Author: Kevin Amaratunga

Which line of the above code declares a variable without allocating memory for it?

Consider the following code:

```
#include <iostream.h>
extern int x; // Statement a
int main()
{
int a, b; // Statement b
double d = 9; // Statement c
a = 1; // Statement d
b = 5; // Statement e
cout << x+ a/b + d/10 << endl;
}
```

Please choose only one answer:

- Statement a
- Statement b
- Statement c
- Statement d
- Statement e

Check the answer of this question online at [QuizOver.com](http://www.quizover.com):

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4.1.3. Which lines of the above code are assignments?

Consider the follow...

Author: Kevin Amaratunga

Which lines of the above code are assignments?

Consider the following code:

```
extern int x; // Statement a
int main()
{
int a, b; // Statement b
double d = 9; // Statement c
a = 1; // Statement d
b = 5; // Statement e
cout << x+ a/b + d/10 << endl;
}
```

Please choose all the answers that apply:

- Statement a
- Statement b
- Statement c
- Statement d
- Statement e

Check the answer of this question online at [QuizOver.com](http://www.quizover.com):

Question: [Which lines of the above code are assignments by Prof. Kevin Amaratunga](#)

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4.1.4. According to the following statement: `const int *p;`

Author: Kevin Amaratunga

According to the following statement: `const int *p;`

Please choose only one answer:

- the value of the pointer `p` cannot change
- the value of the integer that `p` points to cannot change
- both pointer `p` and the value of the integer that `p` points to cannot change
- both pointer `p` and the value of the integer that `p` points to can change
- `p` is a constant pointer to `int`

Check the answer of this question online at QuizOver.com:

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4.1.5. When the following logical test is true?

$(x \geq y \ \&\& \ !x \ \&\& \ x * y < 0 \dots)$

Author: Kevin Amaratunga

When the following logical test is true?

$(x \geq y \ \&\& \ !x \ \&\& \ x * y < 0 \ \&\& \ y == 0)$

Please choose only one answer:

- if x is greater than y, and y is equal to zero
- if both x and y are equal to zero
- if x is positive, and y is equal to zero
- always
- never

Check the answer of this question online at QuizOver.com:

Question: [When the following logical test is true by Prof. Kevin Amaratunga](#)

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4.1.6. Which of the following cases of mixed expressions is/are correct (c...

Author: Kevin Amaratunga

Which of the following cases of mixed expressions is/are correct (circle the correct one(s)), considering the following definition:

double d; float f; int i; char c;

Please choose only one answer:

- 'f' - 'd' is a double
- f / 3.33 is a float
- 'f' - 'd' is an int
- 'f' - 'd' is a char
- none of the above

Check the answer of this question online at QuizOver.com:

Question: [Which of the following cases of mixed expressions by Prof. Kevin](#)

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4.1.7. What is the result of the statement following the definitions given...

Author: Kevin Amaratunga

What is the result of the statement following the definitions given below?

```
char c='b';
```

```
char *pc=&c;
```

```
char *&rc=pc ;
```

```
(*rc)++;
```

Please choose only one answer:

- it increases &rc
- it stores 'b' in variable c
- it increases *rc
- it increases pc, by one byte
- none of the above

Check the answer of this question online at [QuizOver.com](http://www.quizover.com):

Question: [What is the result of the statement following by Prof. Kevin Amaratunga](#)

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4.1.8. Considering the following definitions, which of the provided statem...

Author: Kevin Amaratunga

Considering the following definitions, which of the provided statements (if any) are invalid?

```
double x= 0.5, y=4.9;
```

```
double *px, *py, &rx=x;
```

Please choose all the answers that apply:

- `px =&x; double &rx = *px ;`
- `px = py;`
- `double &ry = rx;`
- `px = px = rx;`
- `px = py = *x;`

Check the answer of this question online at [QuizOver.com](http://www.quizover.com):

Question: [Considering the following definitions which by Prof. Kevin Amaratunga](http://www.quizover.com/question/considering-the-following-definitions-which-by-prof-kevin-amaratunga?pdf=1505)

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4.1.9. Considering the following definitions, which of the provided statem...

Author: Kevin Amaratunga

Considering the following definitions, which of the provided statements (if any), would give the value of x, assuming that x is a double that has been properly defined and initialized to a value?

```
void *pp = &x;
```

```
double *px=&x;
```

```
double **ppx=&px;
```

Please choose all the answers that apply:

- **ppx
- *(static_cast <double*>(pp))
- *pp
- *(&px)
- *((double*)pp)

Check the answer of this question online at QuizOver.com:

Question: [Considering the following definitions which by Prof. Kevin Amaratunga](#)

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4.1.10. Which of the following expressions give(s) as result an int equal t...

Author: Kevin Amaratunga

Which of the following expressions give(s) as result an int equal to 6?

Please choose all the answers that apply:

- 'z' - 't'
- $13 \% 7$
- $7 \% 2$
- $29/5$
- $55 \% 7$

Check the answer of this question online at [QuizOver.com](http://www.quizover.com):

Question: [Which of the following expressions give by Prof. Kevin Amaratunga](#)

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4.1.11. What will be the value of x after the execution of the following li...

Author: Kevin Amaratunga

What will be the value of x after the execution of the following line?

```
int x = (7>6 ? 1+8 : 8)
```

Please choose only one answer:

- 6
- 7
- 1
- 8
- 9

Check the answer of this question online at QuizOver.com:

Question: [What will be the value of x after the execution by Prof. Kevin Amaratunga](#)

Flashcards:

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4.1.12. Which of the following(s) is a (are) valid function declaration (i...

Author: Kevin Amaratunga

Which of the following(s) is a (are) valid function declaration (i.e. prototype)?

Please choose all the answers that apply:

- `void func(int x);`
- `void func(int){};`
- `func(9.5);`
- `void func(int x){ // Function body };`
- `void func(int);`

Check the answer of this question online at [QuizOver.com](http://www.quizover.com):

Question: [Which of the following s is a are valid by Prof. Kevin Amaratunga](#)

Flashcards:

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4.1.13. Which of the following functions, whose declarations are given below...

Author: Kevin Amaratunga

Which of the following functions, whose declarations are given below, will be called:

```
float f;
```

```
printFun(2.0*f);
```

Please choose only one answer:

- void printFun(void)
- void printFun(double)
- void printFun(float)
- float printFun(float)
- none of the above

Check the answer of this question online at [QuizOver.com](http://www.quizover.com):

Question: [Which of the following functions whose declarations by Prof. Kevin](#)

Flashcards:

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4.1.14. How many times is function fib called when num is 3, including the ...

Author: Kevin Amaratunga

How many times is function fib called when num is 3, including the initial fib(3)?

```
int fib(int num) // Fibonacci value of a number
{
switch(num)
{
case 0:
return(0);
break;
case 1:
return(1);
break;
default:
return(fib(num - 1) + fib(num - 2));
break;
}
}
```

Please choose only one answer:

- 1
- 4
- 3
- 5
- none

Check the answer of this question online at QuizOver.com:

Question: [How many times is function fib called when by Prof. Kevin Amaratunga](#)

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4.1.15. In a function with return type void, what happens at return?

Author: Kevin Amaratunga

In a function with return type void, what happens at return?

Please choose only one answer:

- 0 is returned
- 1 is returned
- An arbitrary integer is returned
- A void pointer is returned
- No value is returned

Check the answer of this question online at QuizOver.com:

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