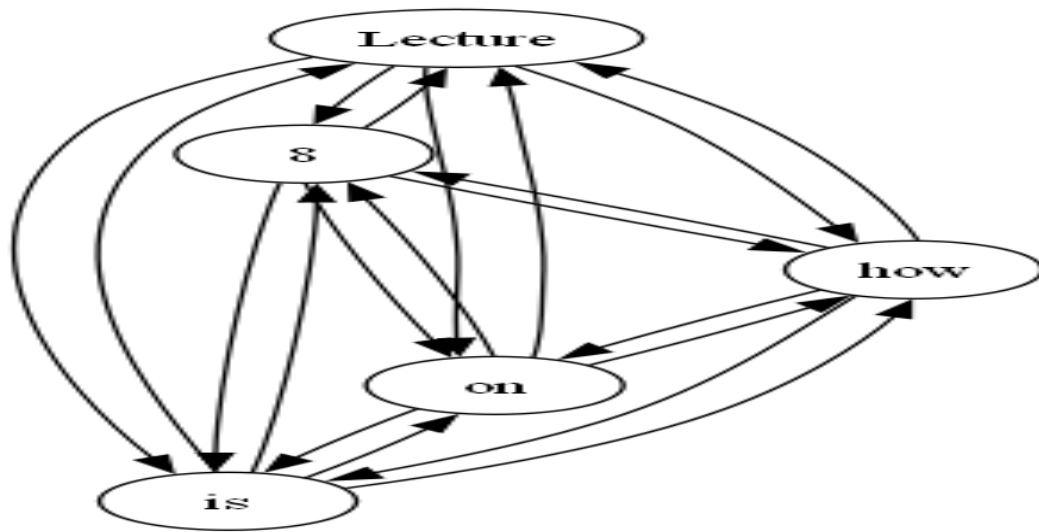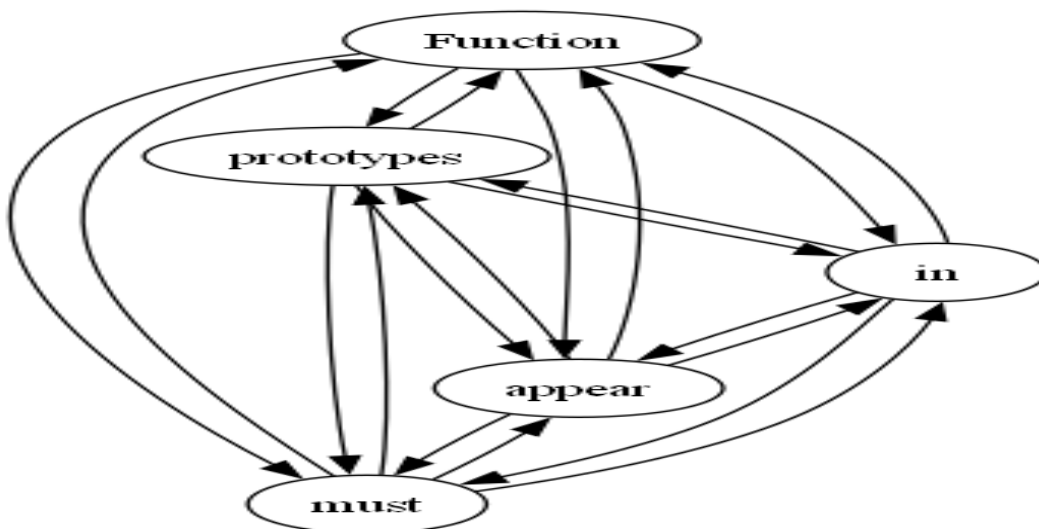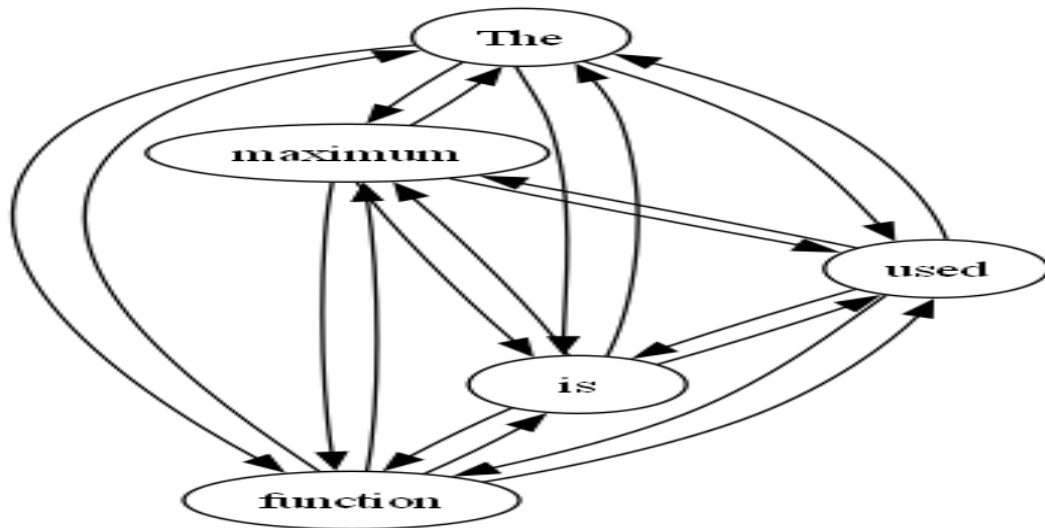Lecture 8 is on how programmers write their own functions. We are going to discuss the function call and how it is used by programmers. We will also discuss how a function is defined and used by a programmer. The final section will be on how to use a function in a computer program. LECTURE 8: How to Use a Function in a Computer Program. Lecture 9: How To Use A Function In A Program.
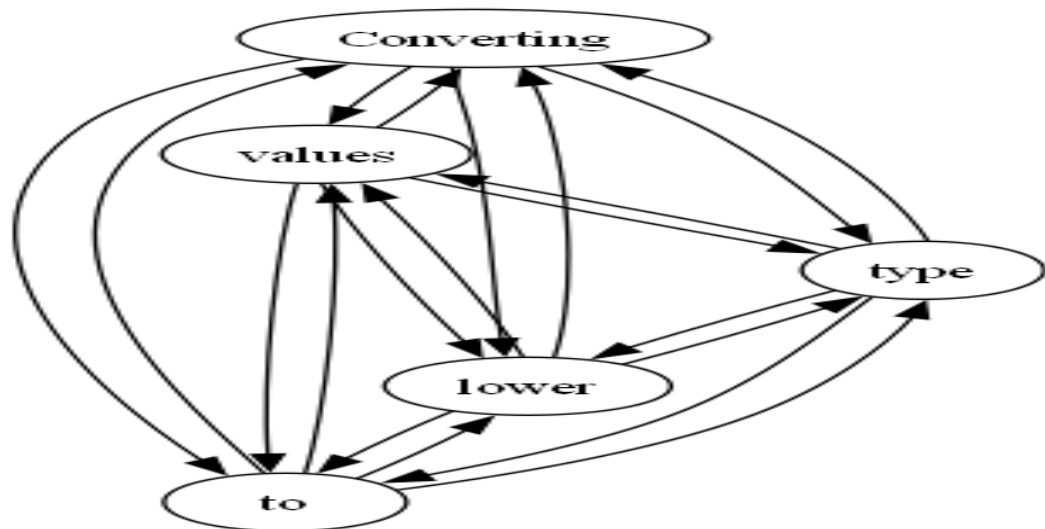

Function prototypes must appear in the code before the function can be called. The compiler use the function prototypes to validate function call calls. The function prototype must match the function definition. A programmer-d7>* program can calculate the square of integers 1 to 10 by using a function prototype. The example program uses a programmer-defined function. The definition of the function prototype also acts as the functionprototype.
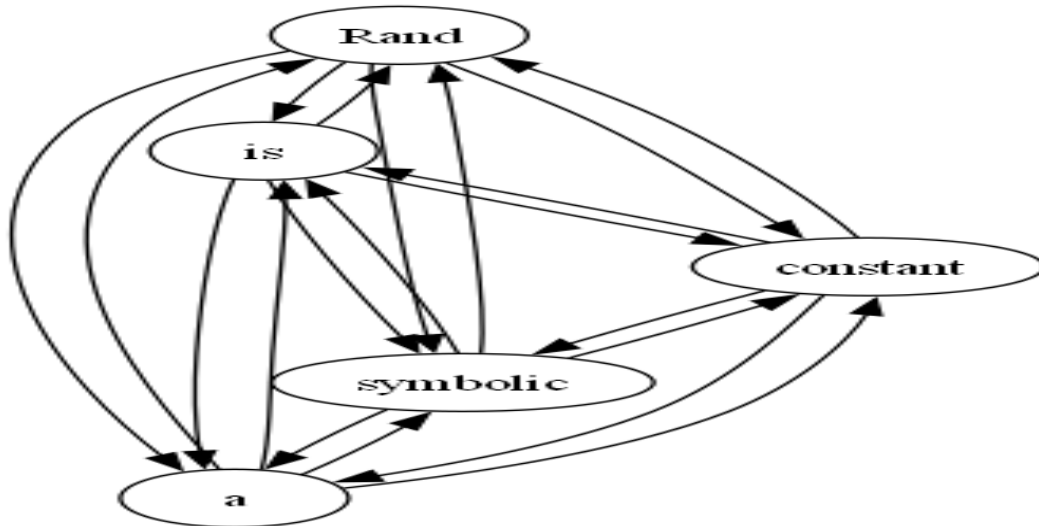

The maximum function is used to determine and return the largest of three integers. The function signature is also called simply signature. It is the portion of a function prototype that includes the name of the function and the parameters (types of its argument) A math library function has a prototype in thatspecifies a double argument that can be called with an integer argument, the function will still work correctly.
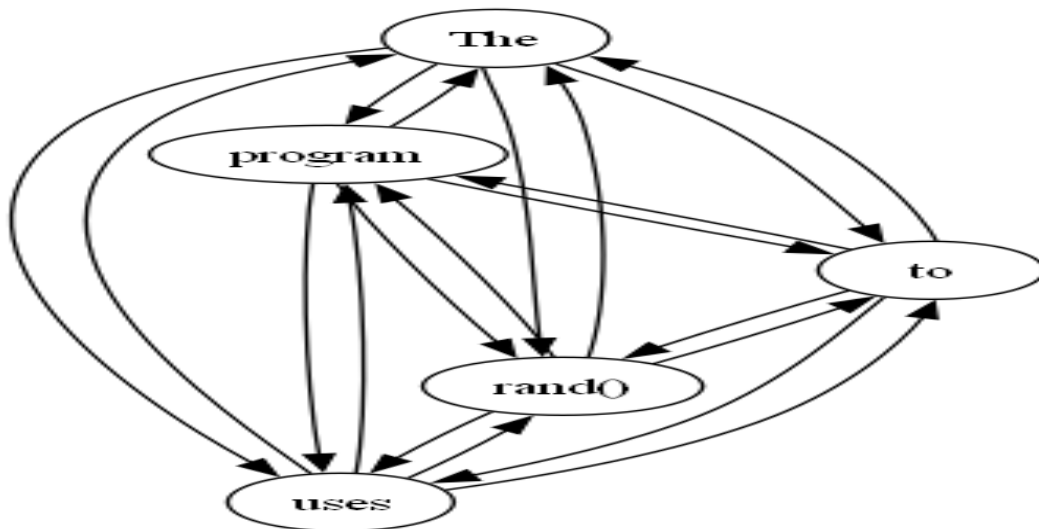
Converting values to lower type can result in incorrect values. A value can be converted to a lower type only by explicitly assigning the value to a variable of lower type. A Type Cast produces the value of one type from another type. The type of each value in a mixed-type expression is promoted to the "highest" type in the expression. Some of the conversions may lead to incorrect results if proper promotion rules are not followed.

Rand is a symbolic constant defined in header file RAND-MAX is a 32767-maximum possible value for 2 byte integer. To demonstrate rand consider a program tosimulate 20 rolls of a six sided die and print the value of each roll. To solve the problem randomizing is done which we will discuss after the next example. The program will generate the same output every time the program runs.

The program uses rand() to generate random numbers. rand() gives the same sequence of numbers each time the program is run. The standard library function srand is used for randomizing the numbers. The count of every number is approximately 1000. The program is written in C++ using the Deitel programming language. For more information on how to use rand, see rand() in C:WDev-Cpp.

Quiz

Q: Lecture 8 is on how programmers write their own functions?

A: We are going to discuss the function call and how it is used by programmers

Q: Function prototypes must appear in the code before the function can be called?

A: The compiler use the function prototypes to validate function call calls

Q: The maximum function is used to determine and return the largest of three integers?

A: The function signature is also called simply signature

Q: Converting values to lower type can result in incorrect values?

A: A value can be converted to a lower type only by explicitly assigning the value to a variable of lower type

Q: Rand is a symbolic constant defined in header file RAND-MAX is a 32767-maximum possible value for 2 byte integer?

A: To demonstrate rand consider a program tosimulate 20 rolls of a six sided die and print the value of each roll

Q: The program uses rand() to generate random numbers?

A: rand() gives the same sequence of numbers each time the program is run

Flashcards

Front: Lecture 8 is on how programmers write their own functions?

Back: We are going to discuss the function call and how it is used by programmers

Front: Function prototypes must appear in the code before the function can be called?

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Front: Rand is a symbolic constant defined in header file RAND-MAX is a 32767-maximum possible value for 2 byte integer?

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Front: The program uses rand() to generate random numbers?

Back: rand() gives the same sequence of numbers each time the program is run