

COMPUTER SCIENCE OVER VIEW

BIL 101 HW #6 ANSWERS

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Answer 1:

some of difference between **compiler** and **assembler**:
first of all we have to know that what is the compiler and assembler means in computer programming. **Compiler** is a language processor that translates the completed source program and then executes that source called **compiler**. For example there is C and C++ are one of the best examples of the compilers in computer programming. In other words **compiler** is the translator that translates the higher level language to assembly language which we also called target program. And the other hand, assembler language is a program that converts the assembly language to machine level language. And for the definition of assembler we can say that assembler is also like compiler a translator that translates the program written in assembly language into machine code. Inverse of compiler **assembler** translates programs for low level language.

Answer2:

a1) functional program is as we know one of the large programming concept. In functional programming as its name indicates every thing is a function so it means that every thing returns a value. For example this `[area=length of (window) * height of (window);]` is an example of functional programming in Java.

a2) imperative program is telling program that **how** to do something or solve problem exactly. If we look for some example like: assume that you want check your email whether email arrived or not. First of all you will go to your gmail and then you will open it. Afterward you will check it. If there is no email you will refresh your email to make sure your self that there is new email or not if there exists a new email so will be able to say it. It was such a kind of imperative programming in our real life.

a3) declarative is a **programming** paradigm—a style of building the structure and elements of computer programs—that expresses the logic of a computation without describing its control flow like abstraction.

b) C is one of the examples of functional programs. And **SQL** is a declarative program for sure. And also like **C#** is one of the functional programs. **F#** is also functional programs and **Haskell** is likewise functional program. Inverse **Prolog** is one of the declarative programs. **Common Lisp** is an imperative program and finally **Java** is a functional program.

c) let us talk about history of (common lisp) program first:

The word (**common lisp**) for developing the lisp accent has started to use by Bob Engelmore in 1981. Firstly they used to design it by electronic mail. For the first time Guy Lewis and Steel in 1982 in ACM symposium they have been able to show the display of common lisp by programming functionals. And let me talk about SQL a bit: during the history of programming people start to need to and program which could be able to interrogate. At first a program language by the name of SQUARE (which is a mathematical syntax) has developed. And then it has abbreviated to the three letters (SQL). SQL programming language used a lot in connection files and it is used in database procedure.

Answer 3)

a) $4 * 6 + 24 = 48$ \Rightarrow at first we evaluate the multiplication and then addition.

b) $27 / (6 - 3 * 1) = 9$ \Rightarrow first of all we evaluate the function between the parenthesis.

c) $4 * 6 / 2 + 17 \% 2 = 13$

d) $6 > 2 + 3 * 2 \ \&\& \ 0 = 0$

Answer 4)

ill write it in Turkish because it will be more clear:

midterm exams = midterm1 , midterm2

midtermTotal= (list_total midterms)

midterm_average = (bol midtermTotal 2)

midterm_indigestibility_marks = (multi _midterm_average 0.8)

final_indigestibility_marks = (multi_final_marks 0.2)

subjetcs_marks = (sub the midterm_indigestibility_final marks_indigestubility_marks)

answer 5)

bill = electric, water, natural gas, telephone, internet

total = last over rest + salary

billTotal = submission of bills

gain = total- billTotal