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PAPER Computer Application

EXAME Mid term

SUBMMITED TO Engr Muneeb khan

Q NO ( B )Briefy explan the different element of data type ?

ANS Types of data

Mainly data is divided into two types

.Numeric data

. Charcter data

. Numeric Data ,

The data which is represented in the form of numbers is known as Numeric Data This includes 0-9 digits, a decimal point (.), +, / , \_ sign

Character Data ,

 Charater data falls into two groups ,

. string data graphical data

String data

String data consist of the sequence of characters . character may be English alphabets, number are space The space , which separates two words , is also a characters . The string data is further divided in to two types

. Alphabetic data

. Alphanumeric data

Graphical Data ;

It is possible that pictures , charts and maps can be treated as data The scanner is normaly used to enter this type of data

The common use of this data is found an the national identity card

Data processing cycle

. Once data is collected , it is processed to convert it into useful

information

. The data is processed again and again until the accurate result is achieved

. This is called data prossesing cycle

.The data prossesing is Vary important activity and anvolves very care ful planning

.Usually dataprossesing activity involves three basic activities

. input

. processing

. out put

Input it is the process through which collected data is transformed into a form that computer cane understand .

Verification ;

The collected data is verif ied to dertermine weather it is coreact us required

Coding ;

The verified data is coded are converted into machine readable form so that it cane be processed through computer .

. Storing

 QNO 2 ( B) Chose true or false. ?

ANS Chose tru or false Expression

. NO1 false

.NO 2 true

. NO3 true

. NO4 true

. NO 5 false

QNO 2 ( A )What is the need of sub program in computer programming. ?

ANS Subprograms are small program that are written withine a larger , main program. The purpose of a subprogram is to perform a perfom a specific task This task may need to be done more than once at various point in the main program.

Computer programing is the prosses of writing instruction that get executed by computer. The instruction also known as code are writing programming which the computer Cane understand an use to perform a task are solve a problem

Basic computer progrmming involves the an alysis of a problem and development of a logical sequence of instruction to solve it . Their cane be numerous paths to a solution and the computer programmer seeks to design and code that which is most efficient among the progrmmers task an understanding requirements ,determing the right programming langvage to use designing or architecting the solution testing debugging and writing documentation so that can be easily understood by other programmer .

QNO 1 ( A ) What is C++ ? Breiefy laborate in your own words the different feature of C++.?

ANS Features of c++

The main feature of C++ is it object oriented programming langvage and it is a vary simple and easy langvage to read and write

. Some important feature of VC++ are 1 object oriented programming to platform dependent 3 Compiler based 4 simple and easy to learn 5

Feature of C++

The main feature of c++ is it objecte oriented programming langvage and it is avary simple and easy langvage to read and write

SOME IMPORTANT FEATURE OF C++ ARE

1 Object oriented programming

2 Platform dependent

3 Compiler based

4 Simple and easy to learn

5 Hug function library

 6 Uses of pointer concept

7 Syntax based

8 Powerful

9 Modularity

10 Case sensitive

What is C++ explain briefly ?

C++ is general purfose objecte oriented programming [ oop] langevage developed by bjarne stroustrup. originally c++ was called c with classes as it had all the properties of the c lanvage with the addition to user difined data types called cases . it was remamed c++ an 1983.

QNO 3 ( A ) How can you break a program into different file? ( write in your own words with an example.?

ANS The programmer can be break single programe into separate source files generally canown as modules these models are completed into machine code by the C++ compiler separalty and than combined during the build prosses to generate a single programe

These modlus are also canown by compiler geks as c++ translation units , The prosses of combining seperelty compilied modlus into a single programe called linking

breaking programs into smaller more manageable pieses has several adventages firt breaking a programe into smaller modules reduces the compile time vary large programe cane take quite awhile

An addition recompiling all of the source code an the project just because one of two lines change is extremely wasteful it much better to recompiles just the modules containing the change of than reaink into all of the unchanged modles to cread a new executable with the change [ compiling usually takes longer them linking

 second , it,s easer to comprehend there fore easer to write test and debug a programe that consist of anumber of well thought out cuasi an dependent modules of each which represent a logical grouping of function a large single source module full of the all functions that a computer program might use becomes haro to keep striagt .

Third is the much yaunted soecter of reuse amodel full of reusable functions that cane be linked into future programe of easier to document and matain a change in the module to fix some oug is quikly rcor poate and other that use module .

Q NO 3 ( B ) . What is the main different between H and CPP average. ?

ANS Different between cpp and h

cpp files is the compilation unites it’s the real cource code files that well be compiled ( inn C++ ) header files are file that well be virpually copy / pasted in the cpp files were the include precompiler in struction appears . Once the header code is inserted

Know differeance between beclaration and a difination Wheares

A CPP files included the difination any header which it in cloudes ( because cpp and headere file to geather become asingle translation unite )

. A header files might be included by more than one cpp file .

. The linker txpically won,t like anything defined in more than one cpp file . there fore any definition in a header file should be in line or static Header files also contain declarations which are used by more than one cpp file.

 Defination that are neher static norinine are placed ncpp files also any declarations that are only needed within one cpp file are often placed within that cpp nstead of any ( sharable ) header file .

CPP – The source code filename typically used for the main () function of a C++ program , where the program begins eseclution ….. H header files are typically used to store C function declarations as well as macro definitios, which can be used by multiple source files . Header files can be inserted into a

A CPP file is a source code file written in C++ , a popular programming language that adds features such as object- oriented programming to C . it may be a standalone program , containing all the code or one of my files referenced in a development project . CPP files containing all the code or one of many files referenced in a development project . CPP files must be compiled by a C++ compilier for the target platform befor the code can be run .

C++ is one of the moste popular programming languages , making Cpp files very common among developers. you can open and edit CPP with a text edtor, such as Microsoft Notepad or Apple Text Edit.

 Q NO 3 ( A ) Part 2 ] How can you break a program into different file ? Write in your own words with an example ?

ANS File I/O in C programming with examples

Jump to Reading and writing string to a file. s : Array of characters to store … fpr : pointer to the input file…. C program \_ writing string to a file.

C Files I/ O : Opening , Reading, Writing and Closing a file

if you successfully created the file from

Example1, running this program will get you the integer you entered .

C Files Examples \_ Programiz C program to write all the member of an array of structure to a file using fwrite ()…

 The programmer can break a single program into separate source files generally known as modules . These modules are compiled into machines are compiled into machine code by the C++ compiler separately and and then combined during the built process to generate a single

Program These modules are also known by geeks as C++ translation units.

What are the advantage of large program breaking into modules ?

What are the advantages of breaking a large program into modules . Called ‘ Modular programming “ . Large programs are easier to understand , debug and maintan when they are divided into modules . M odules also make it easier to reuse the same code in more than one program .

 Q NO 1 ( A ) Part 2) What is the C++ Briefly laborate in your own words the different feature of C++?

Ans Feature of C language it is a robust language with rich set of built \_ in functions and operators that can be used to write any complex program. The C compiler combines the capabilities of an assembly language with feature of a high \_ level language . programs written in C are efficient and fast .

C++ Program

# include < iostram. h >

main ( )

{

cout << ‘’ How are you “

cout

. This is known as out put stream in C++ . Stream is a complicated thing . you will learn a bout it later . Think a stream as a door . The data is transferred through stream , cout takes data form computer and sends it to the out put . For the moment it is a screen of the monitor . hence we use cout for out put .

 <Iostream .h>

This is the name of the library definition file for all input output streams. Your program will almost certainly want to send stuff to the screen and read things from the key board

. iostream. h is the name of the file in which has code to do that work for you .

<<

. The sign << indicates the direction of data . Here it is towards cout and the function of cout is to show data on the screen

‘ How are you “

. The statement between the double quotes ( ‘ ‘ ‘’ ) is known as .character string .

. In C programming character string are written in double quotes . Whatever is written after << and within quotation marks will be direct it to cout will display it on the screen

Q NO 1 ( B ) Part 2] Briefly explain the different element of data type ?

ANS : . Calculations : The arithmethic operations are perfomed on the numeric data to get the required results . For example , total marks of each student are calculation .

. Summarizing; The data processed to represent it in a summarized form . means that the summary of data is prepared for top management . For example , the summary of the data of student is prepared to show the percentage of pass and fail student in the examination etc .

Processing ; The term processing denotes the actual data manipulation techniques such as classifying , sorting , calculating , summarizing , comparing, etc . that convert data into information.

Classification ; The data is classified into different groups and subgroup , so that each group or sub \_ group of data can be handled separately .

Sorting : The data is arranged into an order so that it can be accessed vary quickly as and when required .

Output : After competing the processing step, output is generated .The main purpose of data processing is to get the required result. Mostly, the output stored on the stored media for later user . In output step, following activities can be performed .

Retrieval ;