DELIGHT CONCEPT

COURSE CODE: CIT237

COURSE TITLE: PROGRAMMING AND ALGHORITHM

----------system testing is designed to ensure that the system requirements and specifications are achieved

Functional System Testing

The two efficiency attributes used to analyze the performance of an algorithm are time and

_----------.

Space efficient

(1823) proposed an algorithm that finds a path without any backtracking

Warnsdorff

The full meaning of the acronym ANSI is

__.

American National Standards Institute

----------attributes is used to analyse the performance of algorithm

efficiency

Source code is the coded instruction given to the computer in a language in order to accomplish a given task

particular programming

Another name for nondeterministic stage is

guessing

----------algorithms require dividing problems into sub-instances

Divide- and – Conquer

----------sort can compare adjacent elements of the list and exchange them if they are out of order

Understanding Bubble

----------complexity classifies problems according to their inherent difficulty.

Computational

The ---------- allows a program to be retrieved from the disk and amended as necessary.

Editor

----------sort divide its elements according to their values

merge

Among all elementary sorting methods, ----------sorting is an inferior choice

bubble sort

The more frequently used natural measures of size for a situation where the choice of a parameter indicating an input size is not really a factor is called ----------order n.

Matrix

The ----------case efficiency seeks to provide information on random input

Average

A programming language must have language structure, which consists of ----------, expressions and statements

keywords,

----------is the process of adding elements to the stack

PUSH

A procedure for solving computational problems is called an

algorithm

Decision problems that cannot be solved at all by any algorithm are called ---------- problems

undecidable.

Q24 The ----------function is used in most programming languages to get a remainder when a number is divided by another number

Mod

Algorithms that do not recall back the same algorithm or function are referred to as being -------- _.

Non-recursive

---------- analysis is the first stage involved in developing an efficient program

Problem Analysis

The major standard integer data-types are real, single, double and ---------- _.

Extended

----------sort scan the entire given list to find its smallest element

selection

The object code is the result of the compilation process and it is also referred to as the ----------code

target

Class NP is the class of decision problem that can be solved by ----------polynomial algorithms

Nondeterministic

A ----------is a partially ordered data structure that is used in implementing priority queues

Heap:

A Tree is a connected ----------graph.

cyclic

----------is a fast and easy way to transverse an array of a given set of elements

bubble sort

A graph with no cycle is called __.

Forest

A programming language must have ----------rules for forming statements

syntactic

Sorting is the arrangement of items in a ---------- order

predetermined

The two major reasons for documentation are clarity and

Extensibility

The fundamental building blocks of object-oriented programming are object modelling, classification and ----------

inheritance.

__is a sequence of zero or more elements called nodes

Linked list

Low level programming is also called ----------

assembly language

---------- efficiency seeks to provide information on random input

average-case

__consist of positive and negative whole values

Integers:

__is a means of organising related data items

Data structure

There are ----------levels of the programming language

four

----------This is the final stage of program development

Documentation

-

__is the result of the compilation process

object code

The normal program execution consists of ----------stages

four (4)

__is a finite sequence of unambiguous instructions

An algorithm

__is a data structure in which insertion and deletion can only be done at one end

A stack

__is an optimisation technique which belongs to the family of local search

Hill climbing

__generation of computers was coded in machine language

The first

__programming language is also called assembly language

Low level

Programming languages are languages through which we can ----------the computer

instruct

A graph can be pictorially defined as a connection of points in a plane called --------

or edges

vertices

Languages can be used to execute a wide range of ----------

algorithms,

__is a data structure in which insertion and deletion can only be done at one end

Stack

__this indicates how fast an algorithm runs

Time Efficiency:

The two major reasons for documentation are clarity and _____.

Extensibility

_____programmers are those who design and maintain the basic software that runs the system

System

The three popular methods used to develop a logic plan are flowcharts,_____ and a top-down chart

pseudo-code

_____ is the path that starts and ends at the same vertex and passes through all the other vertices exactly once

Hamiltonian circuit

Which of the options is the standard number of rows and columns in a chess board?

Cavg (n) = 1

The following are advantges of Divide-and Conquer, except?

Quicksort

Partition-Exchange Sort is also known as?

Stable

Operate in place

Adaptive

None of the options is correct

The ideal sorting algorithm would have the following properties,except?

divide and conquer

Which of the following options is the fastest sorting algorithm?

Binary

Which sort is an O(n log n) comparison-basedsorting algorithm

Merge sort

Which of the following sorting algorithms has average-case and worst-case running time of O (n log n) ?

Binary

Which of the following paradigms helps in the discovery of efficient algorithms?

Binary

Which of the options has a time complexity of Θ(n log(n)) on the average?

Mergesort

Which of the following options is a recursive sort algorithm?

Quicksort

Mergesort

Binary

All of the options

Which of the options is an example of divide-and-conquer paradigm?

Stack

A data structure in which insertion and deletion can only be done at one end is called a

Character

Which of the following options is the major reason(s) for documentation?

Program Testing

A finite sequence of unambiguous instructions for solving a problem is called

Source Code

The coded instruction given to the computer in a particular programming language in order to accomplish a given task is called

Literature Review

Which of the following stages of developing an efficient program is not correct?

Procedural Programming

Which of the following options is not correct as for the feature(s) of programming languages?

Specific to particular Machine

Java is an example of a (an)

Object-Oriented Programming

Which of the following is the major advantage of a high level language?

It saves much time and effort when used

A set of codes that instructs the computer to carry out some processes is called

A program

The languages through which we can instruct the computer to carry out some processes is called

Programming

Programming languages are languages through which we can instruct

the computer

programme is a collection of logical declarations about what outcome a function should accomplish

None of the above

...is concerned with making complex calculations very fast and very accurately

Scientific Computing

Programs for use by institutions to manage their information systems

Management Information System

This is a program that converts programs written in assembly

Assembler

Some advantages of high-level language are as follows except

used on few computer

...program is a continuous loop that responds to events that are generated in an unpredictable order

event driven

These are various programming methodologies

all of the above

This is where the clear statement of the problem is stated

Problem Analysis

...is the result of the compilation process

object code

...is a finite sequence of unambiguous instructions

an algorithm

This is a level of programming language which is different from the machine language

Low Level Language

This is a level of programming language which is different from the machine language

Low Level Language

...is a series of steps, each of which performs a calculation

procedural program

Low level programming language is also called assembly language

TRUE

Machine language is peculiar to each type of computer

strongly agree

….language is independent of the computer

high level

Some advantages of high-level language are as follows except

used on few computer

...programming languages are as follows except

E

Major functional programming languages are

all of the above

programme is a collection of logical declarations about what outcome a function should

logic

program is a continuous loop that responds to events that are generated in an unpredictable order

event driven

...program is a collection of cooperating processes

Concurrent

Programs for use by institutions to manage their information systems

Management Information System

….is a program that translates another program written in any programming language

A translator

This is a program that converts programs written in assembly

Assembler

...allows a program to be retrieved from the disk

An editor

...is the process of writing programs

Programming

There are levels of programming languages

three

...is a means of organising related data items

Data

...is a sequence of zero or more elements called nodes

Linked list

The efficiency attributes of an algorithm are

time and space efficiency

….efficiency seeks to provide information on random input

Average-case

...is an optimisation technique which belongs to the family of local search

Hill climbing

Low level programming is also called

Assembly language