Data Warehouse & Pata Mining	
<u></u>	
Assignment-2	-
Qual) what is data washaw 2 Chla the characteristic	
Juent) What is data wavehouse? Explain the characteristic	1
Any- Data warehouse is a large store of data accumule	ite
from a wide sange of sources within a company	
and used to guide management decisions.	
for effectively performing analytic, an organization keeps	_0
rentral data warehouse to closely study its.	
business by organizing understanding and using its	,
historic data for taking strategic decisions and analyzing trends.	
arangang ounes.	16
Eg applications of data wavehousing	* * * * * * * * * * * * * * * * * * * *
- 1 - no observe another distance and having the it which and	
i) Social media websites - They gather data for analyzing	
ii) Banking - They analyze the spending pattern of accoun	<u>t/</u>
condholders may be to provide them with special offer	KI.
iii) Grovernment - They store and analyze tax payments which	h
are used to detect tax thefts.	
Characteristics of data warehouse	C) A T
Helippin many service and the	100
i) Subject priented and have have the most along a manager	
Data warehouse is subject oriented because it deliver	le;
information about a theme or a particular subject	<u>.</u>
alike sales, distributions, marketing etc instead of	- >
organization's current operations.	
This subject focuses on demonstrating and analysis of day	la
to make various decisions.	
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ii) Integrated - 1
Integration means founding a shoved entity to scale all similar data from the different databases. A data warehouse is built by integrating data from
A data warehouse is built by integrating data from various sources of data such that a mainframe and a violational database. It benefits effective analysis of data.
ili) Time variant - mar and a mariant
In this, data is maintained via different intervals of time such as weekly, monthly or annually. The time limits of for data workhouse is wide ranged that that of
operational systems.
It is also time-variance, i.e., once data is stored in the
warehouse then it cannot be modified, after or updated.
iv) Non-volatile.
The data in the wavehouse is permanent. It means that
the data is not exaced or deleted when new data is
inverted. It evaluates the analysis within the technologies of wavehouse.
only two operations are done in the data warehouse
-> Data Loading was about of the communications.
Data Acres of my not been well and make your
Benefits of Data Warehouse
e) can structure for early confortion and undouterde
i) easy structure for easy navigation and understanding ii) complex queries become simpler
managing data from different and scattered sources is easier
in) efficient to manage demand for lots of information ;
is a hillity to analyze large amounts of history and data
The first of the first production of the first of the fir
TEACH CHOICE TOWNERS TO THE PARTY OF THE PAR
of the A Assistant Date garanti concern an action of the solid
moleine wollow show of

Jues 2) Describe the three-tier architecture of data warehouse with diagram. Monttone Anyother integrator data Analyu rowwe Extract querie OLAP Warehouse obviational Server report clean information , DBs Data Marte Front end Data Sources tools OLAP Engine data storage) source l consists data sources In bottom tier, using API's (gateways), data is extracted from operational and external sources ii) Middle Tier -> OLAP JEHNER It enables were to easily and selectively extract and query data in order to analyze it from different > It enables were to points of view. iii) Tob Tier -> front end relient layer - includes guery and reporting tool, analysis tools and/or data mining tools for triend analysis prediction A From the architecture point of view, there are three wavehouse models

1) Endoud.
i) Enterprise Warehouse. - collects all information tobic should throughout the examplication
contains detailed data as well as summarized data & can
comparate wide data integration from several operational systems
contains detailed data as well as summarized data & can
stange from a few glgabytes to terabytes and more.
Pil O
-i) Data Mart
contains a subset of corporate wide data that is important to
a specific group of useri.
scope is limited to specific selected subjects
-> can be marketing datament on an accounting data mant
contains a subset of corporate wide data that is important to a specific group of users. I scope is limited to specific selected subjects I can be marketing datament on an accounting data mant I data is summarized.
- implementation yell of a data mart is more likely to be
implementation yell of a data mart is more likely to be measured in weeks
DESCRIPTION THE RESERVE OF THE PROPERTY OF THE PARTY OF T
in Virtual warehouse
-> group of viens on an operational database - -> recating it is easy but requires additional capacity on operational database review.
-> Irreating it is easy but requires additional capacity on
operational database neuron
1/251 39 1185.01
Que 3) Discuss the multidimensional data model. Also determine schemas for multidimensional databases.
determine schemas for multi dimensional databases.
A CONTRACTOR OF THE CONTRACTOR
Any-Multidimensional data models are designed expressly to
Allapar union unionion
- Data wavehouses and OLAP tools are based on a
multidimentional data model.
-> This model views data in the form of "data cube"
-> cube is a 3D structure which makes the data
retreival efficient.
on the authorized paint of view there are three
1월 5일 보다 그렇게 하는데 그는데 맛이 되었는데 이 그런데 하는데 하는데 그는데 하는데 그리고 하는데 그리고 하는데 그리고 하는데 그렇게 되었다.
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Type	of multidimensional	Lomodel discourse and the		
Star Schema	Snowflake	Fact Constellation Schema		
	SOUND	0,000,000 41112		
Schema	Horbins today Him	Material databases		
It is a dogical	description of	ntive data database.		
Fact Table.	- Driek at it yes - haritanskan sa	one so soi agrando		
Student — Dimonuion Table	Placement Fact Table	Student Dimension Table		
Studentkey	Student Key .)	Company Key		
Name Branch Year	Company key TPO- Key FX	Name Type Location		
	Teachen-key	The state of the s		
Teacher K	Total stud	Teacher Dimension Table		
Diminuion Table	Pass measure			
TPO-Key Nome	fail	Name		
North	of there are no attri- of its own in a fact to	Wal Similar and the start of the		
A 0'- 1 1 1 1 1 2 0 - 0 1	the tribe of all	that are neglectured so		
A fact table also called as master table typically has two types of column: foreign keys to dimension tables and measures—those that contain numeric facts				
-those that contain	numeric facts			
A last table can con	otain tauti data	on detail or aggregated		
level.	Orders	prolond believ sile -		
La gathananakh unner Dane	is tool solder for	1 Voldilling mintred <-		
Dimension Table	. 1979	Let 10th		
A dimension le a st	ructure usually co	mposed of one or more.		
heirarchies that rate	gorizes data. y	a dimension hasn't got dimension or list.		
a hierarchy & level	i', its called flat	dimension or list.		
-> The primary keys of each of the dimension tables are part				

of the composite primary key of the fact table. Dimensionless attributes help to describe the dimensionless value.
TOO STORE THE STORE STOR
2th y Schama
→ shape of a star with points readiating from the center → renter = fact table and points = dimension tables → The fact table usually is in third normal form and dimension tables are denormalized
render = fact table and points = dimension tables
The fact table isually is in third normal form and
dimension tables are de normalized
•
Wharacteristics
is simple I easy to understand architecture
i) orneat query effectivener effectives
iii) Relatively Jone time of loading data into dimension tables
iii) Relatively long time of loading data into dimension tables in most commonly used schema
L. pextured to the second
State and the state of the stat
Snowflake Schema
-> more complex variation of star schema
-> dimension tables are in normalized form
-> dimension table have their own dimension table
-> only dimension table can be, split, not fact table
-> Redundancy & space are reduced due to normalized table
The property will a solvent religiously by such and red seconds &
Most demande distract 10th out 1
Fact Constellation Schema
-> combination of star and snowflake schema
-> also called Galaxy schema
-> contains multiple fact tables that shave many dimension
table
→ complex design & large dimension tables
P N I
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The said the asimumin sail billion all source to missional a
thing was utidal conversion and for the form property will a