Program 12

name
Jenny

name	agee
Harjot	55
Srikanth	43

city
Delhi
Mumbai

max(dose1)	min(dose2)
2022-01-01	2021-07-20

Program 13

POW(2,3)
8

length("Informatics Practices")
21

LEFT("INDIA",3)	RIGHT("Computer Science",4)
IND	ence

YEAR("1979/11/26")	MONTH("1979/11/26")	DAY("1979/11/26")	MONTHNAME("1979/11/26")
1979	11	26	November

PROGRAM 14

Grade	avg(Agee)
A	17.6667
B	17.5000
C	17.0000

name
Bob
Charlie
Eva

grade	MaxAge
A	18
B	19
C	17

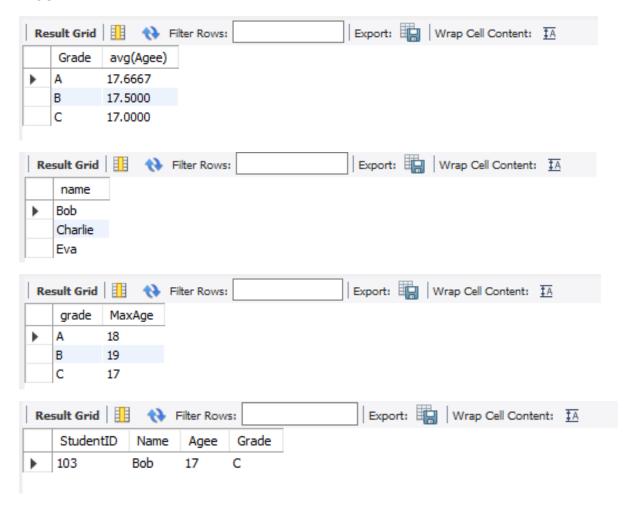| StudentID	Name	Agee	Grade
103	Bob	17	C

Program 15

```
 Enter 1 to push element
 Enter 2 to pop last element
 Enter 3 to peep last element
 Enter 4 to check if stack is empty:4
Stack is underflow.
 Enter 1 to push element
 Enter 2 to pop last element
 Enter 3 to peep last element
 Enter 4 to check if stack is empty:
```

```
 Enter 1 to push element
 Enter 2 to pop last element
 Enter 3 to peep last element
 Enter 4 to check if stack is empty:1
Enter an element:CS
Element CS is added to the stack.
 Enter 1 to push element
 Enter 2 to pop last element
 Enter 3 to peep last element
 Enter 4 to check if stack is empty:1
Enter an element:Lab
Element Lab is added to the stack.
 Enter 1 to push element
 Enter 2 to pop last element
 Enter 3 to peep last element
 Enter 4 to check if stack is empty:1
Enter an element:Manual
Element Manual is added to the stack.



 Enter 1 to push element
 Enter 2 to pop last element
 Enter 3 to peep last element
 Enter 4 to check if stack is empty:2
Manual




 Enter 1 to push element
 Enter 2 to pop last element
 Enter 3 to peep last element
 Enter 4 to check if stack is empty:3
The last added element is Lab
```

Program 16

```
Do you want to enter an item? Type y for yes and n for no:y
Enter item details as follows
Enter Item Name:TV
Enter Description:Telecommunication device used for entertainment
Enter price:50000
Records written successfully!
Do you want to enter an item? Type y for yes and n for no:j
Invalid input
Do you want to enter an item? Type y for yes and n for no:n
```

	A	B	C
1	ItemName	Description	Price
2			
3	TV	Telecommunication device used for entertainment	50000
4			

Program 17

LONDON
NEW YORK

Program 18

India is the fastest growing economy.
India is looking for more investments around the globe.
The whole world is looking at India as a great market.
Most citizens of India can foresee the heights that India is capable of reaching.

```
The word 'India'occurs maximum no. of times,i.e. 5 times.
Other words have these frequencies:
[['India', 5], ['is', 4], ['the', 3], ['fastest', 1], ['growing', 1], ['economy.
', 1], ['looking', 2], ['for', 1], ['more', 1], ['investments', 1], ['around', 1
], ['globe.', 1], ['The', 1], ['whole', 1], ['world', 1], ['at', 1], ['as', 1],
['a', 1], ['great', 1], ['market.', 1], ['Most', 1], ['citizens', 1], ['of', 2],
['can', 1], ['foresee', 1], ['heights', 1], ['that', 1], ['capable', 1], ['reach
ing.', 1]]
```

Program 19

2
4
6
8
10

10
8
6
4
2

Program 20

€•P   }"(Œ⬛trans_id"M"&Œ⬛date"Œ
22-01-2024"Œ⬛amount"G@°| Œ
trans_type"Œ⬛Deposit"u.

```
Enter 1 to add a transaction
Enter 2 to display all transactions
Enter 3 to check current balance:1
Enter transaction id:09876
Enter transaction date (DD-MM-YYYY):22-01-2024
Enter amount:6780
Enter transaction type (Deposit/Withdrawal):deposit
Transaction added successfully!

Enter 1 to add a transaction
Enter 2 to display all transactions
Enter 3 to check current balance:2
ID: 9876 Date: 22-01-2024 Amount: 6780.0 Type: Deposit

Enter 1 to add a transaction
Enter 2 to display all transactions
Enter 3 to check current balance:3
Current account balance is  6780.0
```

Program 21

ID	Name	Marks
101	Alice	65
102	Bob	32
103	Charlie	92

Alice Pass
Bob Fail
Charlie Pass

Program 22

	Book_Name	Author_Name	Price
▶	The Tears	William Hopkins	650
	Thunderbolts	Anna Roberts	750

	price	publishers
▶	405	EPB
	400	EPB

Author_Name	Price
Anna Roberts	750
William Hopkins	650
A.W. Rossaine	350
Brian and Brooke	350
Lata Kapoor	355

	book_Id	Book_Name	Quantity_Issued
▶	C0001	Fast Cook	5
	F0001	The Tears	2
	T0001	My First C+	4

Program 23

	sale_id	sale_date	total_amount
▶	101	2023-01-15	150
	103	2023-03-10	50

	city	total_sales
▶	Chicago	300
	New York	200
	Los Angeles	200

	sale_id	sale_date	total_amount	customer_name
▶	101	2023-01-15	150	John Doe
	103	2023-03-10	50	Bob Johnson

	total_amount	customer_name
▶	200	Alice Smith
	300	Sarah Lee

Program 24

Book_Id	Book_Name	Author_Name	Publishers	Price	Type	Qty
C0001	Fast Cook	Lata Kapoor	EPB	405	Cookery	5
F0001	The Tears	William Hopkins	First Publ.	650	Fiction	20
T0001	My First C+	Brian and Brooke	EPB	400	Text	10
T0002	C++ Brainworks	A.W. Rossaine	TDH	350	Text	15
F0002	Thunderbolts	Anna Roberts	First Publ.	750	Fiction	50

```
('Lata Kapoor',)
('William Hopkins',)
('Brian and Brooke',)
```

Program 25

```
Database created or already exists.
Table created or already exists.
My SQL connection closed.
```

```
cs
dm
information_schema
items
mysql
newdb2
performance_schema
```

Tables_in_cs
▶ bookworld

Program 26

```
Enter book id:123
Enter title of the book:Harry Potter
Enter name of the author:JK Rowling
Do you want to enter another record? (yes/no)yes
Enter book id:345
Enter title of the book:Sapiens
Enter name of the author:Yuval Harari
Do you want to enter another record? (yes/no)YES
Enter book id:567
Enter title of the book:Becoming
Enter name of the author:Michelle
Do you want to enter another record? (yes/no)no
Records inserted successfully!
```

	Book_ID	Book_Title	Author_Name
▶	123	Harry Potter	JK Rowling
	345	Sapiens	Yuval Harari
	567	Becoming	Michelle

Program 27

Book_ID	int
book_title	varchar(50)
Author_Name	varchar(25)

Book_ID	book_title	Author_Name
123	To Kill a Mockingbird	Harper Lee
345	Sapiens	Yuval Harari
567	Becoming	Michelle