

| NAME - | MEET PARMAR |
|---------|----------------------------------|
| EN. NO. | 2202031700027 |
| SUBJECT | OJT PRACTICALS (INTERNSHIP - II) |
| COURSE | B.TECH (BIOT) |

OJT PRACTICAL



AIM: Write a C program to print the address of a variable using a pointer.

```
CODE:- #include
<stdio.h>

int main()
{
    int num;    int
    *ptr = &num;

    printf("Enter The Number: \n");
    scanf("%d",&num);    printf("Address of Number
Variable: %p", ptr);

    return 0;
}

OUTPUT:- Enter The Number:
12
```

Address of Number Variable: 000000000062FE14

Practical - 2



AIM: - Write a C program to create a Calculator using a pointer.

```
CODE:-
#include <stdio.h>
int main() { float
num1, num2,
result; char op;
float *ptr1 = &num1;
float *ptr2 = &num2;
printf("Enter the first
number: ");
scanf("%f", ptr1);
  printf("Enter the operator (+, -, *, /): ");
scanf(" %c", &op);
  printf("Enter the second number: "); scanf("%f",
ptr2);
  switch(op) {
                   case
'+':
result = *ptr1 +
*ptr2;
             break;
    case '-':
result = *ptr1 -
*ptr2;
             break;
     case
result = *ptr1 *
*ptr2;
             break;
    case '/':
result = *ptr1 /
*ptr2;
             break;
     default:
printf("Invalid
operator");
return 1;
```



```
}
  printf("%.2f %c %.2f = %.2f", *ptr1, op, *ptr2, result);
  return 0;
}
OUTPUT:-
Enter the first number: 12
Enter the operator (+, -, *, /): *
Enter the second number: 12
12.00 * 12.00 = 144.00
                                    Practical – 3
AIM: - Write a C program to swap the two values using call by value and call by
reference.
CODE:- #include
<stdio.h>
void swap value(int x, int y)
{
  int temp
= x; x
= y;
y =
temp;
}
void swap_reference(int *x, int *y)
{
  int temp
= *x; *x
= *y;
```



```
*y = temp;
}
int main()
{
  int num1, num2;
  printf("Enter the Number: \n");
scanf("%d",&num1); scanf("%d",&num2);
  printf("\nBefore swapping using call by value: num1 = %d, num2 = %d\n", num1,
num2); swap value(num1, num2); printf("After swapping using call by value:
num1 = %d, num2 = %d\n\n", num1, num2);
  printf("Before swapping using call by reference: num1 = %d, num2 = %d\n", num1,
num2); swap_reference(&num1, &num2); printf("After swapping using call by
reference: num1 = %d, num2 = %d\n", num1, num2);
  return 0;
}
OUTPUT:-
Enter the Number:
12
23
Before swapping using call by value: num1 = 12, num2 = 23
After swapping using call by value: num1 = 12, num2 = 23
Before swapping using call by reference: num1 = 12, num2 = 23
After swapping using call by reference: num1 = 23, num2 = 12
```



AIM :- Define a structure type struct personal that would contain person name, Date of birth and age using this structure to read this information of 4 people and display the same.

CODE:-

```
#include <stdio.h>
struct personal
{
  char name[50];
int
birth_yea
r; int
birth_mo
nth; int
birth_day; int
age;
};
int main() {     struct
personal p[4];
  for (int i=0;i<4;i++)
{
 printf("Enter details for person %d:\n", i+1);
printf("Name: ");
                     scanf("%s", p[i].name);
    printf("Date of Birth (YYYY-MM-DD): ");
    scanf("%d-%d-%d", &p[i].birth_year, &p[i].birth_month,
&p[i].birth_day);
                     printf("Age: "); scanf("%d", &p[i].age);
printf("\n");
  }
```



```
printf("Information of 4 people:\n");
for (int i=0;i<4;i++)
{
    printf("Person %d\n", i+1);
                                   printf("Name:
%s\n", p[i].name);
    printf("Date of Birth: %d-%d-%d\n", p[i].birth_year, p[i].birth_month, p[i].birth_day);
printf("Age: %d\n", p[i].age);
    printf("\n");
 }
  return 0;
}
OUTPUT:-
Enter details for person 1:
Name: yash
Date of Birth (YYYY-MM-DD): 10-09-2005
Age: 18
Enter details for person 2:
Name: rutu
Date of Birth (YYYY-MM-DD): 02-08-1999
Age: 24
Enter details for person 3:
Name: Guddu
Date of Birth (YYYY-MM-DD): 02-09-2005
Age: 18
Enter details for person 4:
Name: Aditya
Date of Birth (YYYY-MM-DD): 20-04-2006
Age: 19
```



Information of 4 people:

Person 1

Name: Deepak

Date of Birth: 10-9-2005

Age: 20

Person 2

Name: Abhisek

Date of Birth: 2-8-1999

Age: 24

Person 3

Name: Rahul

Date of Birth: 2-9-2005

Age: 18

Person 4

Name: Mnish

Date of Birth: 20-4-2006

Age: 17

Practical - 5

AIM:- Write a C program to calculate the sum of n numbers entered by the user using dynamic memory allocation

CODE:-

#include <stdio.h>

#include <stdlib.h>



```
int main()
{ i
n
  printf("Enter the number of elements: "); scanf("%d",
&n);
  int *arr = (int *) malloc(n * sizeof(int));
  printf("Enter %d integers:\n", n);
for (int i = 0; i < n; i++)
{
    scanf("%d", &arr[i]);
  }
  int sum = 0; for (int
i = 0; i < n; i++)
{
    sum += arr[i];
  }
  printf("Sum of %d integers is %d\n", n, sum); free(arr);
  return 0;
}
OUTPUT:-
Enter the number of elements:
2 Enter 2 integers:
12
23
Sum of 2 integers is 35
```



AIM: A file named "New" contains a series of integer numbers. Write a c program to read all numbers from a file and then copy all odd numbers into a file named "odd" and write all even numbers into a file named "even". Then display the values of files odd and even on the screen

```
CODE:- #include
<stdio.h>
int main()
{
  FILE *fp1, *fp2,
*fp3; int num;
  fp1 = fopen("6 New.txt", "r");
  if (fp1 == NULL)
    printf("Error: Unable to open the file.\n");
return 1;
  }
  fp2 = fopen("6 odd.txt", "w");
  if (fp2 == NULL) {
    printf("Error: Unable to open the file.\n");
return 1;
  }
  fp3 = fopen("6 even.txt", "w");
  if (fp3 == NULL)
{
```



```
printf("Error: Unable to open the file.\n");
return 1;
  }
  while (fscanf(fp1, "%d", &num) != EOF)
{
    if (num % 2 == 0)
{
      fprintf(fp3, "%d\n", num);
    }
else
{
      fprintf(fp2, "%d\n", num);
    }
  }
  fclose(fp1);
fclose(fp2); fclose(fp3);
printf("Odd numbers in
the file:\n"); fp2 =
fopen("6 odd.txt", "r");
while (fscanf(fp2, "%d",
&num) != EOF)
{
    printf("%d\n", num);
  }
  fclose(fp2);
  printf("Even numbers in the
file:\n"); fp3 = fopen("6 even.txt",
"r"); while
(fscanf(fp3, "%d", &num) != EOF)
```



```
{
    printf("%d\n", num);
  }
  fclose(fp3);
  return 0;
}
OUTPUT:-
Odd numbers in the file:
33
35
Even numbers in the file:
12
12
34
56
44
36
```

AIM: Write a C++ program to Check if the number is prime or not using a function.

CODE:-

```
#include
<iostream> using
namespace std;
bool Prime(int num)
{
    if(num<=1)</pre>
```



```
{
    return false;
  }
  for (int i=2;i<=num/2;i++)
       {
    if (num%i==0)
               {
      return false;
    }
  }
  return true;
}
int main()
  int num;
cout<<"Enter a
number: "; cin>> num;
  if(Prime(num))
    cout<<num<<" is a prime number."<<endl;</pre>
  }
e
S
e
    cout<<num<< " is not a prime number."<< endl;</pre>
  }
```



```
return 0;
}

OUTPUT :- Enter a number: 34 34 is not a prime number.

Enter a number: 13 13 is a prime number.
```

AIM :- Write a C++ program that prompts the user to enter a letter and check whether a letter is a vowel or constant.

```
CODE :-
             #include
<iostream>
                using
namespace std;
int main()
  char letter; cout<<"Enter a letter: "; cin>>letter;
if(letter=='a' || letter=='e' || letter=='i' || letter=='o' || letter=='u'
|| letter=='A' || letter=='E' || letter=='I' || letter=='O' ||
letter=='U')
        {
    cout<<letter<<" is a vowel."<<endl;
  }
  else
        {
    cout<<letter<<" is a consonant."<<endl;
```



```
}
return 0;
}
OUTPUT :-
Enter a
letter: a a
is a
vowel.

Enter a
letter: c c
is a
consona
nt.
```

AIM :- Write a C++ program to demonstrate the concept of constructor and destructor.

```
CODE :- #include
<iostream> using
namespace std;

class MyClass
{
  public:
  MyClass
()
  {
     cout<<"Constructor called."<<endl;
  }
  ~MyClass()</pre>
```



```
{
    cout<<"Destructor called."<<endl;
 }
};
int main()
{
  MyClass obj;
return 0;
}
CODE:-
```

Constructor called.

Destructor called.

Practical - 10

AIM: - Create a class student that stores roll no, name. Create a class test that stores marks obtained in five subjects. Class result derived from student and test contains the total marks and percentage obtained in test. Input and display information of a student.

CODE:-

```
#include<iost
ream>
#include<stri
ng> using
namespace
std;
class Student{
public:
    int roll_no;
string name;
```



```
};
class
Test{ public:
    int subject_marks[5];
    int total_marks(){
                              int
total = 0;
                 for(int
i=0; i<5; i++){
total += subject_marks[i];
       return total;
    }
    double percentage(){
return (total_marks() / 5.0); }
};
class Result : public Student, public Test{
public:
     Result(int roll_no, string name, int marks[]){
       this->roll_no =
roll_no;
               this->name =
name;
              for(int i=0;
i<5; i++){
subject_marks[i] = marks[i];
       }
    }
};
int main(){  int marks[] = {80,
90, 85, 75, 95};
  Result r(1, "John Doe", marks);
  cout << "Roll No: " << r.roll_no << endl;</pre>
cout << "Name: " << r.name
<< endl;
```



```
cout << "Marks: "; for(int i=0; i<5;
i++){      cout << r.subject_marks[i]
      << " ";
    }
    cout << endl; cout << "Total Marks: " <<
r.total_marks() << endl; cout << "Percentage: "
    << r.percentage() << endl;
    return 0;
}

OUTPUT:-
Roll No: 1
Name: John Doe
Marks: 80 90 85 75 95
Total Marks: 425</pre>
```

AIM: - Write a C++ program to overload binary + operator.

Percentage: 85



```
}
  MyClass operator+(const MyClass& other) const
        {
    int result = value + other.value;
return MyClass(result);
  }
  int getValue() const
{
    return value;
  }
};
int main()
{
        int x,y;
        cout<<"Enter the value: ";</pre>
cin>>x;
cin>>y;
  MyClass a(x);
  MyClass b(y);
  MyClass c=a+b;
  cout<<"a = "<<a.getValue()<< endl;</pre>
cout<<"b = "<<b.getValue()<<endl;</pre>
cout<<"c = a + b = "<<c.getValue()<< endl;
  return 0;
}
```



OUTPUT:-

Enter the value: 23 32 a = 23 b = 32 c = a + b = 55

Practical - 12

ATM: - Create a base class called 'SHAPE' having two data members of type double, member function get_data() to initialize base class data members, pure virtual member function display_area() to compute and display the area of the geometrical object. Derive two specific classes 'TRIANGLE' and 'RECTANGLE' from the base class. Using these three classes design a program that will accept dimension of a triangle / rectangle interactively and display the area.

CODE:-



```
void
dra
w()
        {
    cout<<"Drawing a circle"<<endl;</pre>
  }
};
class Rectangle:public Shape
{
publ
ic:
void dra
w()
        {
    cout<<"Drawing a rectangle"<<endl;</pre>
  }
};
int main()
{
  Shape* s = new Shape();
  Shape* c = new Circle();
  Shape* r = new Rectangle();
  s->draw(); c-
>draw(); r-
>draw(); return
0;
}
OUTPUT:-
Drawing a shape
```

Drawing a circle

Drawing a rectangle



AIM:- To study DDL-create and DML-insert commands.

DDL (Data Definition Language) and DML (Data Manipulation Language) are two different types of SQL (Structured Query Language) commands used to manage and manipulate databases.

DDL commands are used to define and manipulate the structure of the database, including creating tables, altering tables, adding columns, and deleting tables.

DML commands, on the other hand, are used to manipulate the data within the database, including inserting, updating, and deleting data in tables.

Let's start by looking at the syntax and usage of DDL-create and DML-insert commands:

DDL-Create Command:

The create command is used to create a new table in the database. The basic syntax of the create command is as follows:

CODE:-

```
CREATE TABLE
table_name ( column1
datatype, column2
datatype, column3
datatype,
....
);
```

For example, to create a table named "customers" with columns for "id", "name", "email", and "phone", the following command would be used:

CODE:-

CREATE TABLE customers (id INT PRIMARY KEY, name



VARCHAR(50), email VARCHAR(50), phone VARCHAR(20));

DML-Insert Command:

The insert command is used to insert data into a table in the database. The basic syntax of the insert command is as follows:

CODE:-

INSERT INTO table_name (column1, column2, column3, ...)

VALUES (value1, value2, value3, ...);

For example, to insert a new row of data into the "customers" table created in the previous example, the following command would be used:

CODE:-

INSERT INTO customers (id, name, email, phone)

VALUES (1, 'John Doe', 'john@example.com', '555-1234');

This command would insert a new row into the "customers" table with the values specified for the "id", "name", "email", and "phone" columns.

I hope this helps you understand the basics of DDL-create and DML-insert commands in SQL. If you have any further questions, feel free to ask!

Practical - 14

AIM:- Create following Table

1. Job (job_id, job_title, min_sal, max_sal)

| COLUMN NAME | DATA TYPE |
|-------------|-----------|
| | |



| job_id | Varchar(15) |
|-----------|-------------|
| job_title | Varchar(30) |
| min_sal | Int |
| max_sal | Int |

CODE:- CREATE TABLE Job (job_id VARCHAR(15) PRIMARY KEY, job_title VARCHAR(30), min_sal INT, max_sal INT);

1. Employee (emp_no, emp_name, emp_sal, emp_comm, dept_no)

| COLUMN NAME | DATA TYPE |
|-------------|--------------|
| emp_no | Int |
| emp_name | Varchar(30) |
| emp_sal | decimal(8,2) |
| emp_comm | decimal(6,1) |



| dept_no | Int |
|---------|-----|
| | |

CODE:- CREATE

TABLE Employee (
emp_no INT PRIMARY
KEY, emp_name
VARCHAR(30),
emp_sal
DECIMAL(8,2),
emp_comm
DECIMAL(6,1),
dept_no INT
);

2. deposit(a_no,cname,bname,amount,a_date)

| COLUMN NAME | DATA TYPE |
|-------------|--------------|
| a_no | Int,identity |
| cname | Varchar(50) |
| bname | Varchar(30) |
| amount | Decimal(4,2) |
| a_date | Date |



code:- CREATE TABLE deposit (a_no INT IDENTITY PRIMARY KEY, cname VARCHAR(50), bname VARCHAR(30), amount DECIMAL(4,2), a_date DATE);

3. borrow(loanno,cname,bname,amount)

| COLUMN NAME | DATA TYPE |
|-------------|--------------|
| loanno | Int |
| cname | Varchar(25) |
| bname | Varchar(20) |
| amount | Decimal(6,2) |

CODE:-

```
CREATE TABLE borrow ( loanno INT PRIMARY KEY, cname VARCHAR(25),
bname VARCHAR(20),
amount DECIMAL(6,2)
);
```

Practical - 15



AIM: - Create tables and insert sample data in tables.

Write SQL queries to insert following data into tables

Insert following values in the table Employee.

| emp_n | emp_name | emp_sal | emp_comm | dept _no |
|-------|----------|---------|----------|----------|
| 101 | Smith | 800 | | 20 |
| 102 | Snehal | 1600 | 300 | 25 |
| 103 | Adama | 1100 | 0 | 20 |
| 104 | Aman | 3000 | | 15 |
| 105 | Anita | 5000 | 50000 | 10 |
| 106 | Sneha | 2450 | 24500 | 10 |
| 107 | Anamika | 2975 | | 30 |

CODE:-

```
CREATE TABLE Employee (
```

```
emp_no INT PRIMARY KEY, emp_name VARCHAR(30)
NOT NULL, emp_sal DECIMAL(8,2) NOT NULL, emp_comm DECIMAL(6,1), dept_no INT NOT NULL
);
```

INSERT INTO Employee (emp_no, emp_name, emp_sal, emp_comm, dept_no) VALUES (101, 'Smith', 800.00, 20, 0),

```
(102, 'Snehal', 1600.00, 300, 25),
```

(103, 'Adama', 1100.00, 0, 20),

(104, 'Aman', 3000.00, 15, 0),

(105, 'Anita', 5000.00, 50000, 10),

(106, 'Sneha', 2450.00, 24500, 10),

(107, 'Anamika', 2975.00, 30, 0);

AIM:- Create tables and insert sample data in tables.



Write SQL queries to insert following data into tables

Insert following values in the table Job.

| job_id | job_name | min_sal | max_sal |
|---------|-------------------|---------|---------|
| IT_PROG | Programmer | 4000 | 10000 |
| MK_MGR | Marketing manager | 9000 | 15000 |
| FI_MGR | Finance manager | 8200 | 12000 |
| FI_ACC | Account | 4200 | 9000 |
| LEC | Lecturer | 6000 | 17000 |
| COMP_OP | Computer Operator | 1500 | 3000 |

CODE:- CREATE TABLE Job (job_id VARCHAR(15) PRIMARY KEY, job_name VARCHAR(30) NOT NULL, min_sal DECIMAL(10,2) NOT NULL, max_sal DECIMAL(10,2) NOT NULL);

INSERT INTO Job (job_id, job_name, min_sal, max_sal) VALUES

('IT_PROG', 'Programmer', 4000.00, 10000.00),

('MK_MGR', 'Marketing manager', 9000.00, 15000.00), ('FI_MGR', 'Finance manager', 8200.00, 12000.00),

('FI_ACC', 'Account', 4200.00, 9000.00),

('LEC', 'Lecturer', 6000.00, 17000.00),

('COMP_OP', 'Computer Operator', 1500.00, 3000.00);

AIM:- Create tables and insert sample data in tables.

Write SQL queries to insert following data into table.

Insert following values in the table **deposit**.

| A_no | cname | Bname | Amount | date |
|------|-------|---------|--------|-----------|
| 101 | Anil | andheri | 7000 | 01-jan-06 |



| 102 | sunil | virar | 5000 | 15-jul-06 |
|-----|-------|------------|------|-----------|
| 103 | jay | villeparle | 6500 | 12-mar-06 |
| 104 | vijay | andheri | 8000 | 17-sep-06 |
| 105 | keyur | dadar | 7500 | 19-nov-06 |
| 106 | mayur | borivali | 5500 | 21-dec-06 |

CODE:-

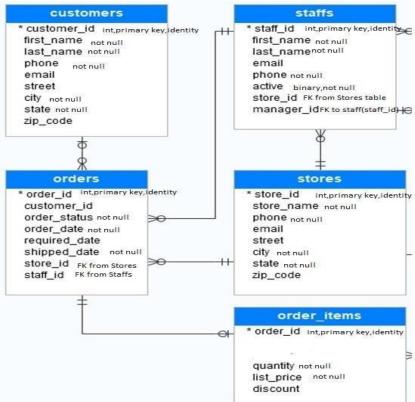
```
CREATE TABLE deposit (
       INT
               IDENTITY
a_no
PRIMARY KEY,
                  cname
VARCHAR(50) NOT NULL,
bname
           VARCHAR(30)
NOT NULL,
                 amount
DECIMAL(8,2) NOT NULL,
a_date DATE NOT NULL
);
INSERT INTO deposit (cname, bname, amount, a_date) VALUES
 ('Anil', 'andheri', 7000.00, '2006-01-01'),
 ('sunil', 'virar', 5000.00, '2006-07-15'),
 ('jay', 'villeparle', 6500.00, '2006-03-12'),
 ('vijay', 'andheri', 8000.00, '2006-09-17'),
 ('keyur', 'dadar', 7500.00, '2006-11-19'),
 ('mayur', 'borivali', 5500.00, '2006-12-21');
```

Practical - 16

AIM:- Write the SQL queries to provide constraints on given tables.

Create A Database Sales and Write SQL Queries to create following tables with all constrains mentioned in image.





CODE:-

```
CREATE TABLE customers ( customer_id INT PRIMARY
KEY, first_name
VARCHAR(50) NOT NULL,
last_name VARCHAR(50)
NOT NULL, phone
VARCHAR(20), email
VARCHAR(100), street
VARCHAR(100), city
VARCHAR(50) NOT NULL,
state VARCHAR(50) NOT
NULL,
```

```
zip_code VARCHAR(20)
);
```

CREATE TABLE staff (staff_id INT PRIMARY KEY, first_name VARCHAR(50) NOT NULL, last_name VARCHAR(50) NOT NULL,



```
email
            VARCHAR(100),
phone VARCHAR(20) NOT
NULL, active BOOLEAN NOT
NULL,
 store_id INT,
 FOREIGN KEY (store_id) REFERENCES stores(store_id)
);
CREATE TABLE stores (
store id INT PRIMARY KEY,
store_name VARCHAR(50)
NOT NULL,
                  phone
VARCHAR(20) NOT NULL,
 email VARCHAR(100),
street VARCHAR(100), city
VARCHAR(50) NOT
NULL, state
VARCHAR(50) NOT
NULL, zip_code
VARCHAR(20),
manager_id INT,
 FOREIGN KEY (manager_id) REFERENCES staff(staff_id)
);
CREATE TABLE orders ( order_id
INT PRIMARY KEY, order_date
DATE NOT NULL, required_date
DATE, shipped_date DATE NOT
NULL, order_status
VARCHAR(20)
NOT NULL,
customer
_id
       INT,
staff_id INT,
store_id
INT,
 FOREIGN KEY (customer_id) REFERENCES customers(customer_id),
 FOREIGN KEY (staff_id) REFERENCES staff(staff_id),
 FOREIGN KEY (store_id) REFERENCES stores(store_id)
);
```



```
CREATE TABLE order_items (
order_id INT, item_id INT PRIMARY
KEY, quantity INT
NOT NULL, list_price DECIMAL(10,
2) NOT NULL, discount
DECIMAL(5, 2),
FOREIGN KEY (order_id) REFERENCES orders(order_id)
);
```

AIM: - Write the SQL queries to perform various aggregate functions on table data.

1. List total deposit from deposit.

CODE:- SELECT SUM(amount) AS total_deposit FROM deposit;

2. List total amount from andheri branch

CODE:- SELECT SUM(amount) AS total_amount FROM deposit WHERE bname = 'andheri';

3. Count total number of customers

CODE:- SELECT COUNT(DISTINCT cname) AS total_customers FROM deposit;

4. Count total number of customer's cities

CODE:- SELECT COUNT(DISTINCT bname) AS total_cities FROM deposit;

- 5. Update the value dept_no to 10 where second character of emp. name is 'm'.
 CODE: UPDATE Employee SET dept_no = 10 WHERE emp_name LIKE '_m%';
- 6. Update the value of employee name whose employee number is 103. CODE:-UPDATE Employee SET emp_name = 'Adam' WHERE emp_no = 103;



- 7. Write a query to display the current date. Label the column Date CODE:-SELECT GETDATE() AS Date;
- For each employee, display the employee number, salary, and salary in creased by 15% and expressed as a whole number. Label the column New Salary
 CODE: SELECT emp_no, emp_sal, ROUND(emp_sal*1.15,0) AS "New Salary" FROM Employee;
- 9. Modify your previous query to add a column that subtracts the old salary from the new salary. Label the column Increment.

CODE:- SELECT emp_no, emp_sal, ROUND(emp_sal*1.15,0) AS "New Salary", ROUND(emp_sal*0.15,0) AS Increment FROM Employee;

Practical - 18

AIM:- Write the SQL queries to perform numeric, date and String functions.

1. Retrieve all data from employee, jobs and deposit.

CODE :- SELECT * FROM employee;
 SELECT * FROM jobs;
 SELECT * FROM deposit;

2. Give details of account no. and deposited rupees of customers having account opened between dates 01-01-06 and 25-07-06.

CODE:- SELECT a_no, amount FROM deposit

WHERE a_date BETWEEN '2006-01-01' AND '2006-07-25';

3. Display all jobs with minimum salary is greater than 4000.



CODE:- SELECT * FROM jobs WHERE min sal > 4000;

4. Display name and salary of employee whose department no is 20. Give alias name to name of employee.

```
CODE :- SELECT emp_no, emp_name AS employee_name, emp_sal, dept_no
FROM employee

WHERE dept_no = 20;
```

5. Display employee no,name and department details of those employee whose

```
department lies in(10,20)

CODE:- SELECT emp_no, emp_name, dept_no FROM employee

WHERE dept_no IN (10, 20);
```

6. Display all employee whose name start with 'A' and third character is 'a'.

```
CODE :- SELECT * FROM employee

WHERE emp_name LIKE 'A _a%';
```

7. Display name, number and salary of those employees whose name is 5 characters long and first three characters are 'Ani'.

```
CODE :- SELECT emp_name, emp_no, emp_sal FROM employee
    WHERE emp_name LIKE 'Ani___';
```

8. Display the non-null values of employees and also employee name second charactershould be 'n' and string should be 5 character long.

```
CODE:- SELECT * FROM employee
```

```
WHERE emp_name LIKE '_n%' AND LENGTH(emp_name) = 5 AND emp_name IS

NOT NULL;
```

9. Display the null values of employee and also employee name's third character should be 'a'.

```
CODE :- SELECT * FROM employee

WHERE emp_name LIKE '__a%' AND emp_name IS NULL;
```



AIM: - Make a Resume using the HTML tags without CSS.

```
CODE:-<!DOCTYP
E html>
<html>
<head>
       <title>My Resume</title>
</head>
<body>
       <h1>Guddu Giri</h1>
       <div>Website designer</div>
  <div>guddugiri216@gmail.com</div>
  <div>7985248023</div>
  <div>Ahmedabad, Gujarat</div>
       <h3>Objective</h3>
To obtain a challenging position as a software engineer where I can utilize my skills and
knowledge to develop innovative solutions for complex problems.
       <h3>Education</h3>
       B.Tech(IT), Aditya Silver oak Institute of Technology, 2022
                12<sup>th</sup> Gurukul Mission Sr.sec. School UP 2020-2021
                  10<sup>th</sup> Smart Move Academy , 2018-2029
       <h3>Skills</h3>
```



```
Proficient in Java, C++, Python, HTML, CSS, Bootstrap, Sql and JavaScript
           Strong problem-solving and critical thinking skills
     <h3>Language</h3>
     English
          Hindi
     <h3>Hobbies</h3>
     Writing
           Cooking
          Network marketing
     <h4>Certificate</h4>
     Artificial Intelligence
           HTML
CSS
</body>
```



</html>

Guddu Giri

Website designer guddugiri216@gmail.com 7985248023 Ahmedabad, Gujarat

Objective

To obtain a challenging position as a software engineer where I can utilize my skills and knowledge to develop innovative solutions for complex problems.

Education

- B.Tech(IT), Aditya Silver oak Institute of Technology, 2022
- 12th Gurukul Mission Sr.sec. School UP 2020-2021
- 10th Smart Move Academy , 2018-2029

Skills

- · Proficient in Java, C++, Python, HTML, CSS, Bootstrap, Sql and JavaScript
- Strong problem-solving and critical thinking skills

Language

- English
- Hindi

Hobbies

- Writing
- · Cooking
- Network marketing

Certificate

- Artificial Intelligence
- HTML
- CSS

Practical - 20

AIM:- Create an HTML webpage that shows Poster Presentation using all Table Properties.



```
th, td {
     border: 1px solid black;
           padding: 8px;
                 text-align: left;
           }
           th {
                 background-color: #f2f2f2;
           }
           .highlight {
     background-color: yellow;
           }
      </style>
</head>
<body>
      <h1>Poster Presentation</h1>
      <thead>
                 Presenter
                       Title
                        Date
                 </thead>
           Vijaya Raghavan
                        Effects of Exercise on Mental Health
                        Sep 3, 2019
```

```
Pratyasha Jain
```

Impact of Social Media on Adolescents

March 1, 2023

K. Vijayaraghavan

The Role of Nutrition in Aging

Sep 22, 2008

Here are some key takeaways from the presentations:

Presenter

Key Takeaway

Vijaya Raghavan

Exercise can improve mental health outcomes in a

variety of populations, including those with depression and anxiety.

Pratyasha Jain

Social media use may contribute to increased rates of anxiety and depression among adolescents.

K. Vijayaraghavan



Proper nutrition can help slow the aging process and prevent agerelated diseases.

Overall, these presentations highlight the important role that lifestyle factors can play in both physical and mental health outcomes. By making small changes to our diet and exercise habits, we can improve our overall well-being.

</body>

</html>

OUTPUT:-

Poster Presentation

| Presenter | Title | Date |
|-------------------|---------------------------------------|---------------|
| Vijaya Raghavan | Effects of Exercise on Mental Health | Sep 3, 2019 |
| Pratyasha Jain | Impact of Social Media on Adolescents | March 1, 2023 |
| K. Vijayaraghavan | The Role of Nutrition in Aging | Sep 22, 2008 |

Here are some key takeaways from the presentations:

| Presenter | Key Takeaway |
|-------------------|---|
| Vijaya Raghavan | Exercise can improve mental health outcomes in a variety of populations, including those with depression and anxiety. |
| Pratyasha Jain | Social media use may contribute to increased rates of anxiety and depression among adolescents. |
| K. Vijayaraghavan | Proper nutrition can help slow the aging process and prevent age-related diseases. |

Overall, these presentations highlight the important role that lifestyle factors can play in both physical and mental health outcomes. By making small changes to our diet and exercise habits, we can improve our overall well being.

Practical - 21

AIM: - Create an HTML page table and form

CODE:-<!DOCTYPE html>

<html>

<head>

<title>Table and Form with CSS</title>



```
<style> /* Table Styles */
table { border-collapse:
collapse; width: 100%;
}
th, td { textalign: left; padding:
8px; border-bottom: 1px solid
#ddd;
}
th {
background-color: #f2f2f2;
}
/* Form
Styles
*/ form {
width: 50%;
margin: 0 auto;
}
label {
display:
block;
marginbotto
m: 8px;
}
input[type="text"], textarea
{ width:
100%; padding:
12px 20px; margin:
8px 0; box-sizing:
border-box; border: 2px
solid #ccc; border-
radius: 4px; resize:
vertical;
}
```



```
input[type="submit
"] {
backgroundcolor:
#4CAF50; color:
white; padding:
12px 20px; border:
none;
borderradius: 4px;
cursor: pointer;
}
input[type="submit"]:hover { background-color:
#45a049;
}
.form-group { margin-
bottom: 16px;
}
.error
{
color:
red;
fontsize:
12px;
margi n-
top: 4px;
}
</style>
</head>
<body>
<h1>Table and Form</h1>
<thead>
Name
```



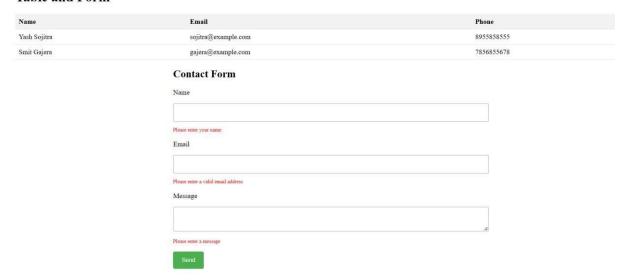
```
Email
Phone
</thead>
Guddu giri
guduxt@example.com
8955858555
Smit Gajera
gajera@example.com 7985248023
<form>
<h2>Contact Form</h2>
<div class="form-group">
<label for="name">Name</label>
<input type="text" id="name" name="name" required>
<span class="error">Please enter your name</span>
</div>
<div class="form-group">
<label for="email">Email</label>
<input type="text" id="email" name="email" required>
<span class="error">Please enter a valid email address</span>
</div>
```



<div class="form-group">
<label for="message">Message</label>
<textarea id="message" name="message" required></textarea>
Please enter a message
</div>
<input type="submit" value="Send">
</form>
</body>
</html>

OUTPUT:-

Table and Form



Practical - 22

AIM :- Create Registration form and do proper validation with HTML 5 inbuilt functionality. (Don't use JavaScript).

CODE:-<!DOCTYP
E html>
<html>
<head>
<title>Table and Form with CSS</title>



```
<style>
   /* Table Styles */
   table {
    border-collapse: collapse;
width: 100%;
   }
th, td {
text-align:
left;
padding: 8px;
border-
bottom: 1px
solid #ddd;
}
th {
    background-color: #f2f2f2;
   }
   /* Form
Styles */
            form
     width:
50%;
margin: 0 auto;
   }
   label {
display: block;
margin-bottom: 8px;
   }
   input[type="text"], textarea
     width:
{
100%;
           padding:
12px 20px;
               margin:
8px 0;
          box-sizing:
border-box;
                border:
2px solid #ccc;
border-radius: 4px;
```



```
resize: vertical;
  }
input[type="submit"] {
background-color:
#4CAF50;
            color:
white;
         padding:
12px 20px;
             border:
none;
         borderradius:
4px;
   cursor: pointer;
  }
  input[type="submit"]:hover {
                                background-color:
#45a049;
  }
  .form-group {
margin-bottom: 16px;
  }
  .error {
             color:
       font-size:
red;
12px;
         margin-
top: 4px;
  }
 </style>
</head>
<body>
  <h1>Table and Form</h1>
  <thead>
   Name
    Email
```



```
Phone
 </thead>
Yash Sojitra
  sojitra@example.com
                               8955858555
 Smit Gajera
  gajera@example.com
  7856855678
 <form>
<h2>Contact Form</h2>
<div class="form-group">
 <label for="name">Name</label>
 <input type="text" id="name" name="name" required>
 <span class="error">Please enter your name</span>
</div>
<div class="form-group">
 <label for="email">Email</label>
 <input type="text" id="email" name="email" required>
 <span class="error">Please enter a valid email address</span>
</div>
<div class="form-group">
```



<label for="message">Message</label>
<textarea id="message" name="message" required></textarea>
Please enter a message
</div>
<input type="submit" value="Send">
</form>
</body>
</html>

OUTPUT:-

| Username: | | |
|-----------|--|--|
| Password: | | |
| Email: | | |
| Phone: | | |
| Age: | | |

Practical - 23



AIM: Make a Resume using the HTML tags with CSS.

```
CODE:-<!DOCTYP
E html>
<html>
 <head>
  <title>Resume</title>
<style
  body
{
    font-family: Arial,
sans-serif;
fontsize: 16px;
lineheight: 1.6;
color: #333;
   }
   h1, h2, h3 {
                   margin-top:
0;
   }
h1 {
font-size:
36px;
color:
#0077b5;
   }
h2 {
font-size:
28px;
color:
#222;
   }
h3 {
font-size:
24px;
color:
#555;
```



```
}
margi
n: 0;
}
                   max-width:
   .container {
800px;
           margin:
0 auto;
padding: 20px;
  }
   .header {
                text-
align: center;
margin-bottom: 30px;
   }
   .header h1 {
margin-bottom: 10px;
   }
   .contact-info {
                  margin-bottom:
30px;
   }
   .contact-info p {
margin-bottom: 10px;
  }
   .section {
margin-bottom: 30px;
   }
   .section h2 {
    margin-bottom: 20px;
   }
   .section ul {
```



```
list-style: none;
                  margin:
0;
   padding: 0;
  }
   .section li {
   margin-bottom: 10px;
  }
   .section li span {
display: inline-
block;
         width:
150px;
   font-weight: bold;
  }
 </style>
</head>
<body>
  <div class="container">
   <div class="header">
   <h1>Guddu giri</h1>
   Web Developer
   </div>
   <div class="contact-info">
   <strong>Email:</strong> guddugiri216@example.com
   <strong>Phone:</strong> 7985248023
    <strong>Website:</strong> crazycodes.com
   </div>
   <div class="section">
    <h2>Summary</h2>
```



Software developer with 5 years of experience creating dynamic web applications.
Skilled in HTML, CSS, JavaScript, and various web frameworks. Passionate about developing clean, efficient code and delivering engaging user experiences.

```
</div>
  <div class="section">
   <h2>Skills</h2>
   <span>HTML:</span> Advanced
    <span>CSS:</span> Advanced
    <span>JavaScript:</span> Advanced
    <span>React:</span> Intermediate
    <span>Angular:</span> Intermediate
    <span>Vue:</span> Beginner
   </div>
  <div class="section">
   <h2>Experience</h2>
   <span>Web Developer</span>
     Google corp
     January 2023 - Present
     Develop and maintain company website using HTML, CSS, and JavaScript
Create and manage databases using MySQL
      </body>
      </html>
OUTPUT:-
```



Guddu giri

web Developer

Email: guddugiri216@example.com

Phone: 7985248023
Website: crazycodes.com

Summary

Software developer with 5 years of experience creating dynamic web applications. Skilled in HTML, CSS, JavaScript, and various web frameworks. Passionate about developing clean, efficient code and delivering engaging user experiences.

Skills

HTML: Advanced

CSS: Advanced

JavaScript: Advanced

React: Intermediate

Angular: Intermediate

Vue: Beginner

Experience

Web Developer

Google corp

January 2023 - Present

Develop and maintain company website using HTML, CSS, and JavaScript

Create and manage databases using MySQL

Practical - 24

AIM: - Create an HTML Page containing the following Gray Layout using CSS



```
<style>
    *{font-size: 30px;font-weight: bolder;}
    #r1{background-color: gray; height: 50px; width: 48%; padding-top: 10px;padding-left:
2%;margin-bottom: 20px;}
    #r2,#r5{background-color: gray; height: 40px; width: 48%; padding-top:
10px;paddingleft:
2%;margin-bottom: 20px; text-align: center;}
    #r3{background-color: gray; height: 70px; width: 48%; padding-top: 30px;padding-left:
2%;margin-bottom: 20px; text-align: center;}
    #r4{height: 500px; width: 100%; margin-bottom: 20px;}
    #r4 div{float: left; background-color: gray; padding-top: 250px; height: 250px; textalign:
center;}
    #r4c1{width: 10%; margin-right: 5%; }
    #r4c2{width: 35%; }
  </style>
</head>
<body>
  <div id="maindiv">
  <div id="r1">Logo</div>
  <div id="r2">Navigation</div>
  <div id="r3">Header</div>
  <div id="r4">
    <div id="r4c1">Side Bar</div>
    <div id="r4c2">Body Area</div>
  </div>
  <div id="r5">Footer</div>
  </div>
</body>
</html>
```



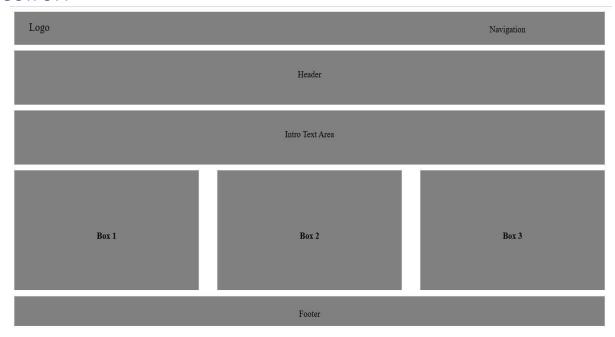
| Logo | |
|----------|------------|
| | Navigation |
| | Header |
| Side Bar | Body Area |
| | Footer |

```
CODE:-<!DOCTYP
E html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0"> <title>Gray
Layout 2</title>
  <style>
    #r1{background-color: gray; width: 78%;padding-top: 15px;padding-left: 2%; marginleft:
10%; height: 40px;}
    #r1c1{float: left; font-size: larger;}
    #r1c2{margin-left:80%;padding-top: 5px;}
```



#r2, #r3{width: 80%;margin-left: 10%;height: 60px;padding-top: 30px; backgroundcolor: gray;margin-top: 10px; text-align: center;} #r4 div{float: left; background-color: gray; font-weight: bolder;} #r4c1{margin-left: 10%;text-align: center;width: 25%;height: 100px;margin-top: 10px;paddingtop: 100px;} #r4c2{margin-left: 2.5%;text-align: center;width: 25%;height: 100px;margin-top: 10px;paddingtop: 100px;} #r4c3{margin-left: 2.5%;text-align: center;width: 25%;height: 100px;margin-top: 10px;paddingtop: 100px;} #r5{width: 80%;margin-left: 10%;background-color: graY;margin-top: 220px;height: 30px;padding-top: 20px;text-align: center;} </style> </head> <body> <div id="r1"> <div id="r1c1">Logo</div> <div id="r1c2">Navigation</div> </div> <div id="r2">Header</div> <div id="r3">Intro Text Area</div> <div id="r4"> <div id="r4c1">Box 1</div> <div id="r4c2">Box 2</div> <div id="r4c3">Box 3</div> </div> <div id="r5">Footer</div> </body> </html>

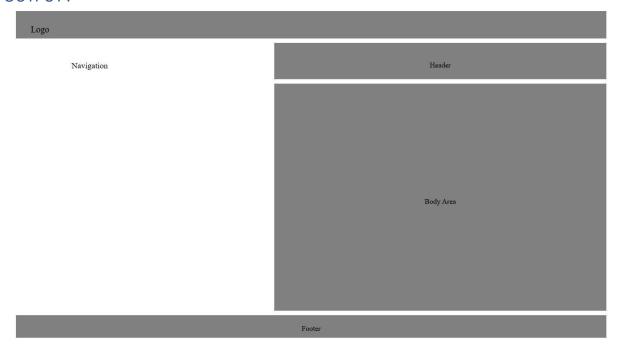




```
CODE:-<!DOCTYP
E html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0"> <title>Gray
Layout 3</title>
  <style>
    #r1{padding-top: 30px;height: 30px; margin-top: 10px;margin-left: 10%;width:
78%;paddingleft: 2%; background-color: gray;font-size: larger;}
    #r2 div{float: left;margin-left: 10%;margin-top: 10px;height: 40px;padding-top: 40px;
text-align: center;}
    #r2c1{ width: 20%;margin-right: 5%;font-size: large;}
    #r2c2{width: 45%; background-color: gray;}
    #r3{margin-bottom: 10px; margin-left: 45%; width: 45%; height: 250px;padding-top:
250px;textalign: center;background-color: gray;margin-top: 100px;}
    #r4{margin-left: 10%; width: 80%;text-align: center;padding-top: 20px;height:
30px;backgroundcolor: gray;} </style>
</head>
```



```
<body>
<div id="r1">Logo</div>
<div id="r2">
<div id="r2c1">Navigation</div>
<div id="r2c2">Header</div>
</div>
</div>
<div id="r3">Body Area</div>
<div id="r4">Footer</div>
</body>
</html>
```





<style>

```
#r1{background-color: gray; width: 78%;padding-top: 15px;padding-left: 2%; marginleft:
10%; height: 40px;}
    #r1c1{float: left; font-size: larger;}
    #r1c2{margin-left:80%;padding-top: 5px;}
    #r3{margin-bottom: 10px;height: 100px; margin-left: 10%;margin-top: 10px;}
    #c1,#c2,#c3{float: left; background-color: gray; width: 10%;margin-right: 15%; textalign:
center;}
    #c5,#c6,#c7{float: left;background-color: gray; width: 10%; margin-right: 15%;text-align:
            #c9,#c10,#c11{float: left;background-color: gray; width: 10%; margin-right:
15%;text-align:
center;}
    #c13,#c14,#c15{float: left;background-color: gray; width: 10%; margin-right:
15%;textalign: center;}
    #r4 div{float: left; background-color: gray; font-weight: bolder;}
    #r4c1{margin-left: 10%;text-align: center;width: 25%;height: 100px;margin-top:
10px;paddingtop: 100px;}
    #r4c2{margin-left: 2.5%;text-align: center;width: 25%;height: 100px;margin-top:
10px;paddingtop: 100px;}
    #r4c3{margin-left: 2.5%;text-align: center;width: 25%;height: 100px;margin-top:
10px;paddingtop: 100px;}
    #r5{width: 80%;margin-left: 10%;background-color: graY;margin-top: 250px;height:
30px;padding-top: 20px;text-align: center;}
  </style>
</head>
<body>
  <div id="r1">
    <div id="r1c1">Logo</div>
    <div id="r1c2">Navigation</div>
  </div>
```



```
<div>
    <div></div>
  </div>
  <div id="r3">
    <div id="c1">1</div>
    <div id="c2">2</div>
    <div id="c3">3</div>
    <div id="c4">4</div><br>
    <div id="c5">5</div>
    <div id="c6">6</div>
    <div id="c7">7</div>
    <div id="c8">8</div><br>
    <div id="c9">9</div>
    <div id="c10">10</div>
    <div id="c11">11</div>
    <div id="c12">12</div><br>
    <div id="c13">13</div>
    <div id="c14">14</div>
    <div id="c15">15</div>
    <div id="c16">16</div>
  </div>
  <div id="r4">
    <div id="r4c1">Box 1</div>
    <div id="r4c2">Box 2</div>
    <div id="r4c3">Box 3</div>
  </div>
  <div id="r5">Footer</div>
</body>
```



</html>

OUTPUT:-

| Logo | | | Navigation |
|-------|----|--------|------------|
| 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 |
| 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 |
| Box 1 | | Box 2 | Box 3 |
| | | Footer | |

Practical - 25

AIM: - Demonstrate JavaScript Form Validation with proper examples

```
CODE:-<!DOCTYP
E html>
<head>
    <title>Basic Form Validation</title>
    <script> function

validateForm() {
```



```
var name =
document.forms["myForm"]["name"].value;
                                              var email =
document.forms["myForm"]["email"].value;
                                             var
password =
document.forms["myForm"]["password"].value;
    if (name == "" || email == "" || password == "") {
     alert("Please fill out all fields");
return false;
   }
   }
  </script>
</head>
<body>
  <form name="myForm" onsubmit="return validateForm()">
   <label for="name">Name:</label>
   <input type="text" id="name" name="name">
   <br><br>>
   <label for="email">Email:</label>
   <input type="email" id="email" name="email">
   <br><br>>
   <label for="password">Password:</label>
   <input type="password" id="password" name="password">
   <br><br>>
   <input type="submit" value="Submit">
  </form>
</body>
</html>
```



| Name: | This page says | |
|-----------|----------------------------|----|
| Email: | Please fill out all fields | |
| Password: | | ОК |
| Submit | | |

Practical - 26

AIM: Write a javascript to check if the number is even or odd.

```
CODE:-<!DOCTYP
E html>
<html>
<head>
  <title>Even or Odd Checker</title>
  <script>
  function checkEvenOrOdd()
  {
    var number =
document.getElementById("number").value;
                                              if (number%2==0)
     document.getElementById("result").innerHTML = number + " is even";
    } else {
     document.getElementById("result").innerHTML = number + " is odd";
   }
  }
  </script>
</head>
<body>
```



| <label for="number">Enter a number:</label> |
|---|
| <input id="number" type="number"/> |
| < |
| <button onclick="checkEvenOrOdd()">Check</button> |
| < |
| <div id="result"></div> |
| |
| |
| |
| OUTPUT:- |
| Enter a number: 3 |
| Check |
| 3 is odd |
| |
| Enter a number: 2 |
| Check |
| 2 is even |

PRACTICAL - 27

AIM: - Create a page and access the LocationAPI

```
CODE:-<!DOCTYP
E html>
<html>
<head>
<title>Location API Example</title>
<script>
function getLocation()
{
    if (navigator.geolocation)
```



```
{
     navigator.geolocation.getCurrentPosition(showPosition);
    }
e
ls
e
    {
     alert("Geolocation is not supported by this browser.");
    }
   }
   function showPosition(position)
   {
    var latitude =
position.coords.latitude;
                            var
longitude =
position.coords.longitude;
                              var accuracy =
position.coords.accuracy;
                              var timestamp = new
Date(position.timestamp);
    document.getElementById("latitude").innerHTML = "Latitude: " + latitude;
document.getElementById("longitude").innerHTML = "Longitude: " + longitude;
document.getElementById("accuracy").innerHTML = "Accuracy: " + accuracy + " meters";
document.getElementById("timestamp").innerHTML = "Timestamp: " + timestamp;
   }
  </script>
</head>
<body>
  <h1>Location API Example</h1>
  <button onclick="getLocation()">Get Location</button>
  <br><br>>
  <div id="latitude"></div>
  <div id="longitude"></div>
  <div id="accuracy"></div>
  <div id="timestamp"></div>
```



```
</body>
```

Location API Example

Get Location

Latitude: 21.535707 Longitude: 70.450813 Accuracy: 22 meters

Timestamp: Wed Mar 22 2023 10:14:58 GMT+0530 (India Standard Time)

PRACTICAL - 28

AIM: - Create a simple XMLHTTPRequest, and retrieve the data from the text file.



```
{
       var response = xhr.responseText;
document.getElementById('output').innerHTML = response;
      }
els
e
      {
       document.getElementById('output').innerHTML = 'Error: ' + xhr.status;
      }
     }
    };
   xhr.send();
   }
  </script>
</head>
<body>
  <h1>XMLHTTPRequest Example</h1>
  <button onclick="loadData()">Load Data</button>
  <br><br>>
  <div id="output"></div>
</body>
</html>
```

XMLHTTPRequest Example

Load Data

Error: 0