

DAY4-MONGODB-03/08/2023

TASK1: Queries for creating,updating,modify the data in mongodb

```
mongosh mongodb://127.0.0.1:27017/mongosh?directConnection=true&serverSelectionTimeoutMS=2000
{ "_id": ObjectId("64cb3f049462c784ba7405ba"), name: 'kiruba' }
payoda> db.Employee.find({name:"kiruba"});
payoda> db.Employees.find({name:"kiruba"});
[ { _id: ObjectId("64cb3e389462c784ba7405b7"), name: 'kiruba' },
  { _id: ObjectId("64cb3f049462c784ba7405ba"), name: 'kiruba' } ]
payoda> db.Employees.find({NAME:"kiruba"});
payoda> db.Employees.find({}, {name:1});
[ { _id: ObjectId("64cb3e389462c784ba7405b7"), name: 'kiruba' },
  { _id: ObjectId("64cb3e779462c784ba7405b8"), name: 'nandhini' },
  { _id: ObjectId("64cb3e779462c784ba7405b9"), name: 'suriya' },
  { _id: ObjectId("64cb3f049462c784ba7405ba"), name: 'kiruba' } ]
payoda> db.Employees.find({}, {name:0});
[ { _id: ObjectId("64cb3e389462c784ba7405b7") },
  { _id: ObjectId("64cb3e779462c784ba7405b8") },
  { _id: ObjectId("64cb3e779462c784ba7405b9") },
  { _id: ObjectId("64cb3f049462c784ba7405ba") } ]
payoda> db.Employees.find({_id:"64cb3e389462c784ba7405b7"}, {name:0});
payoda> db.Employees.find({_id:"64cb3e389462c784ba7405b7"}, {name:1});
payoda> db.Employees.find({_id:64cb3e389462c784ba7405b7}, {name:1});
Uncaught:
SyntaxError: Identifier directly after number. (1:25)
> 1 | db.Employees.find({_id:64cb3e389462c784ba7405b7}, {name:1});
    |                               ^
    2 |
payoda> db.Employees.find({name:0}, {name:1});
payoda> db.Employees.find({name:"kiruba"}, {name:1});
[ { _id: ObjectId("64cb3e389462c784ba7405b7"), name: 'kiruba' },
  { _id: ObjectId("64cb3f049462c784ba7405ba"), name: 'kiruba' } ]
```

```
mongosh mongodb://127.0.0.1:27017/mongosh?directConnection=true&serverSelectionTimeoutMS=2000
payoda> db.users.find();
[ { _id: ObjectId("64cb4d3c9462c784ba7405bb"),
  name: 'John Doe',
  age: 30,
  email: 'john.doe@example.com',
  isActive: true } ]
payoda> db.users.find({age:{ $gt:25 }}, {name:1});
[ { _id: ObjectId("64cb4d3c9462c784ba7405bb"), name: 'John Doe' } ]
payoda> db.users.find({age:{ $gt:25 }}, { _id:1, name:1 });
[ { _id: ObjectId("64cb4d3c9462c784ba7405bb"), name: 'John Doe' } ]
payoda> db.users.find({age:{ $gt:25 }}, { _id:0, name:1 });
[ { name: 'John Doe' } ]
payoda> db.users.find({age:{ $gt:25 }}, {age:0, name:1});
MongoServerError: Cannot do inclusion on field name in exclusion projection
payoda> db.users.find({name:"John Doe", age:{ $gt:25 }});
Uncaught:
SyntaxError: Unexpected token (1:31)
> 1 | db.users.find({name:"John Doe", age:{ $gt:25 }}});
    |                               ^
    2 |
payoda> db.users.find({name:"John Doe", age:{ $gt:25 }});
[ { _id: ObjectId("64cb4d3c9462c784ba7405bb"),
  name: 'John Doe',
  age: 30,
  email: 'john.doe@example.com',
  isActive: true } ]
payoda> db.users.find({name:"John Doe", age:{ $gt:25 }, isActive:1});
[ { _id: ObjectId("64cb4d3c9462c784ba7405bb"), isActive: true } ]
payoda> db.users.find({name:"John Doe", age:{ $gt:25 }, _id:0, isActive:1});
[ { isActive: true } ]
payoda> db.users.find({name:"John Doe", age:{ $gt:40 }, _id:0, isActive:1});
payoda> db.users.find({name:"John Doe", age:{ $lt:40 }, _id:0, isActive:1});
[ { isActive: true } ]
```

```
[
  {
    _id: ObjectId("64cb4d3c9462c784ba7405bb"),
    name: 'John Doe',
    age: 30,
    email: 'john.doe@example.com',
    isActive: true
  }
]
payoda> db.users.find({name:"John Doe",age:{$gt:25}},{isActive:1});
[ { _id: ObjectId("64cb4d3c9462c784ba7405bb"), isActive: true } ]
payoda> db.users.find({name:"John Doe",age:{$gt:25}},{_id:0,isActive:1});
[ { isActive: true } ]
payoda> db.users.find({name:"John Doe",age:{$gt:40}},{_id:0,isActive:1});
[]
payoda> db.users.find({name:"John Doe",age:{$lt:40}},{_id:0,isActive:1});
[ { isActive: true } ]
payoda> db.users.find({name:"John Doe",age:{$in:[20,33]}},{_id:0,isActive:1});
[]
payoda> db.users.find({name:"John Doe",age:{$in:[20,30]}},{_id:0,isActive:1});
[ { isActive: true } ]
payoda> db.users.find({name:"John Doe",age:{$gt:20,$lt:30}},{_id:0,isActive:1});
[]
payoda> db.users.find({name:"John Doe",age:{$gt:20,$lt:31}},{_id:0,isActive:1});
[ { isActive: true } ]
payoda> db.users.find({$or:[{name:"John Doe",age:{$gt:10,$lt:31}}]},{_id:0,isActive:1});
[ { isActive: true } ]
payoda> db.users.find({$or:[{name:"John Doe",age:{$gt:10,$lt:31}}]},{_id:0,name:1,isActive:1});
Uncaught:
SyntaxError: Unexpected token, expected ",", (1:56)
> 1 | db.users.find({$or:[{name:"John Doe",age:{$gt:10,$lt:31}}]},{_id:0,name:1,isActive:1});
    |                                     ^
    2 |
payoda> db.users.find({$or:[{name:"John Doe",age:{$gt:10,$lt:31}}]},{_id:0,name:1,isActive:1});
Uncaught:
SyntaxError: Unexpected token (1:37)
> 1 | db.users.find({$or:[{name:"John Doe",age:{$gt:10,$lt:31}}]},{_id:0,name:1,isActive:1});
    |                                     ^
    2 |
payoda> db.users.find({$or:[{name:"John Doe",age:{$gt:10,$lt:31}}]},{_id:0,name:1,isActive:1});
```

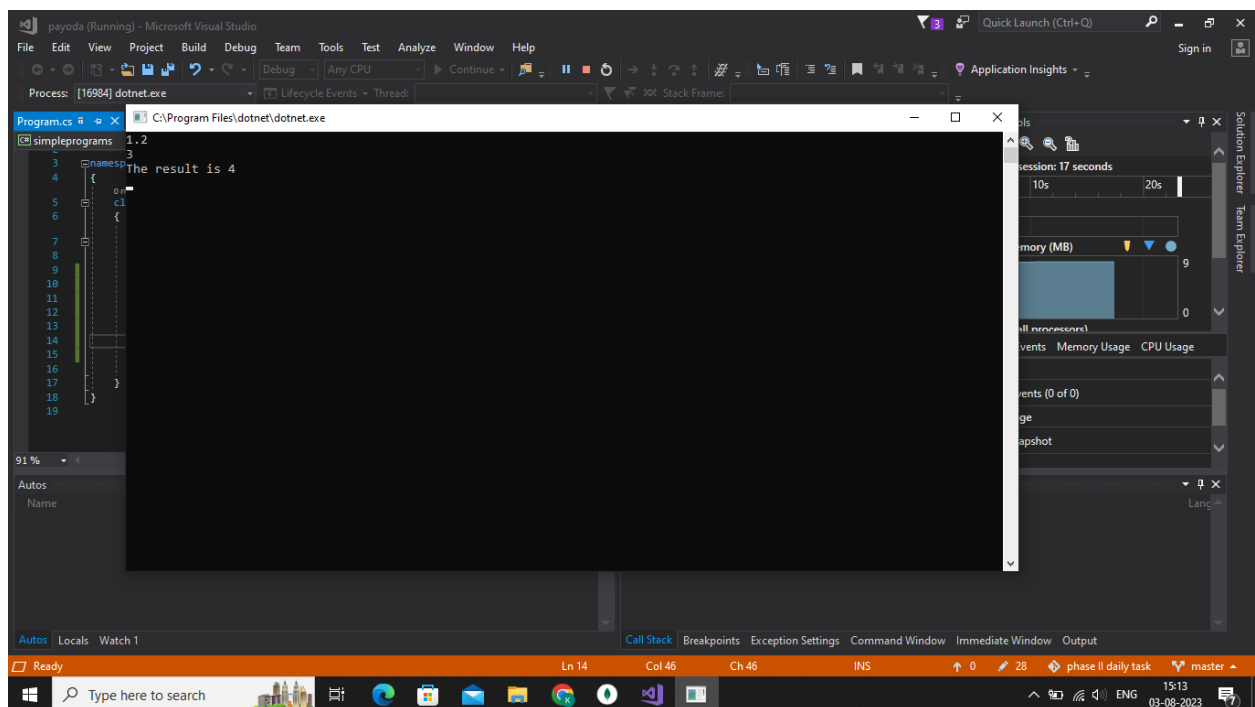
Practice problems:C# sharp programs

Problem 1:addition of two numbers

namespace simpleprograms

```
{  
    class Program  
    {  
        static void Main(string[] args)  
        {  
            double num1, num2;  
            int res;  
            num1 = Convert.ToDouble(Console.ReadLine());  
            num2 = Convert.ToDouble(Console.ReadLine());  
            res =(int)( num1 + num2);  
            Console.WriteLine(res);  
            Console.ReadLine();  
        }  
    }  
}
```

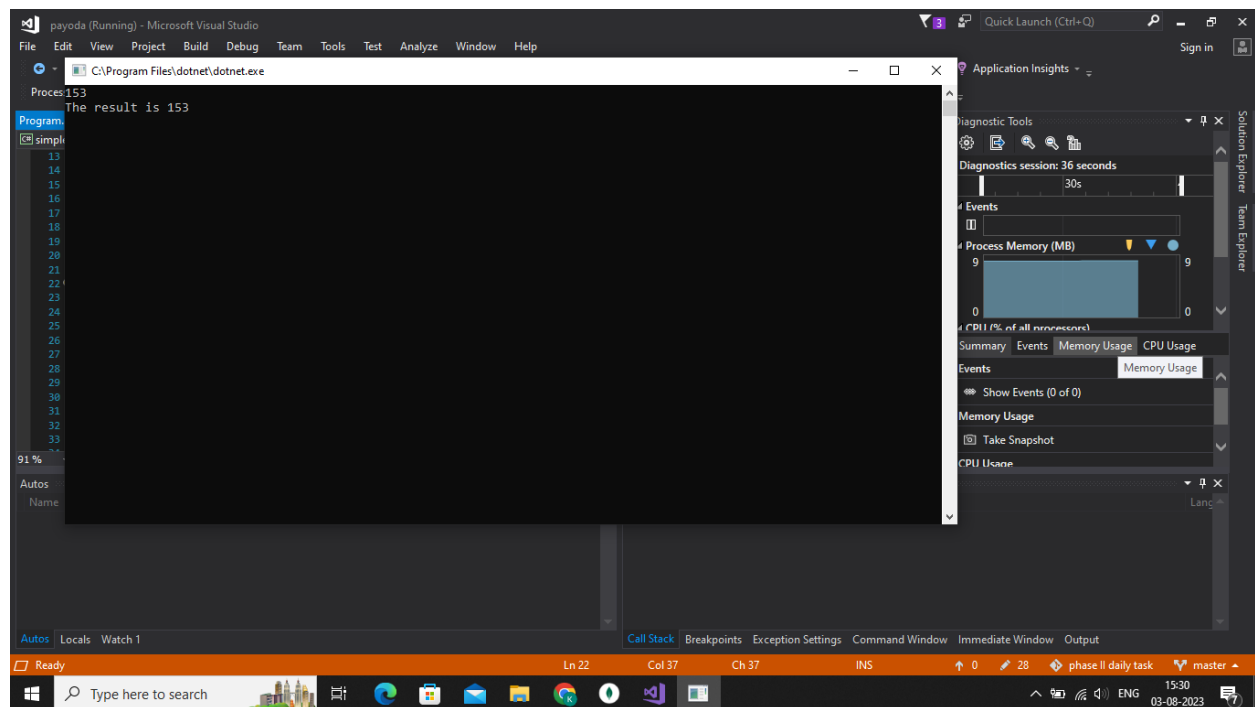
OUTPUT:



Problem 2:armstrong number

```
int num, sum = 0,rem,number;
num = Convert.ToInt32(Console.ReadLine());
number = num;
while(num>0)
{
    rem = num % 10;
    sum =rem*rem*rem+sum;
    num = num / 10;
}
if (sum == number)
{
    Console.WriteLine("The result is " + sum);
}
else
{
    Console.WriteLine("not arm");
}
Console.ReadLine();
}
```

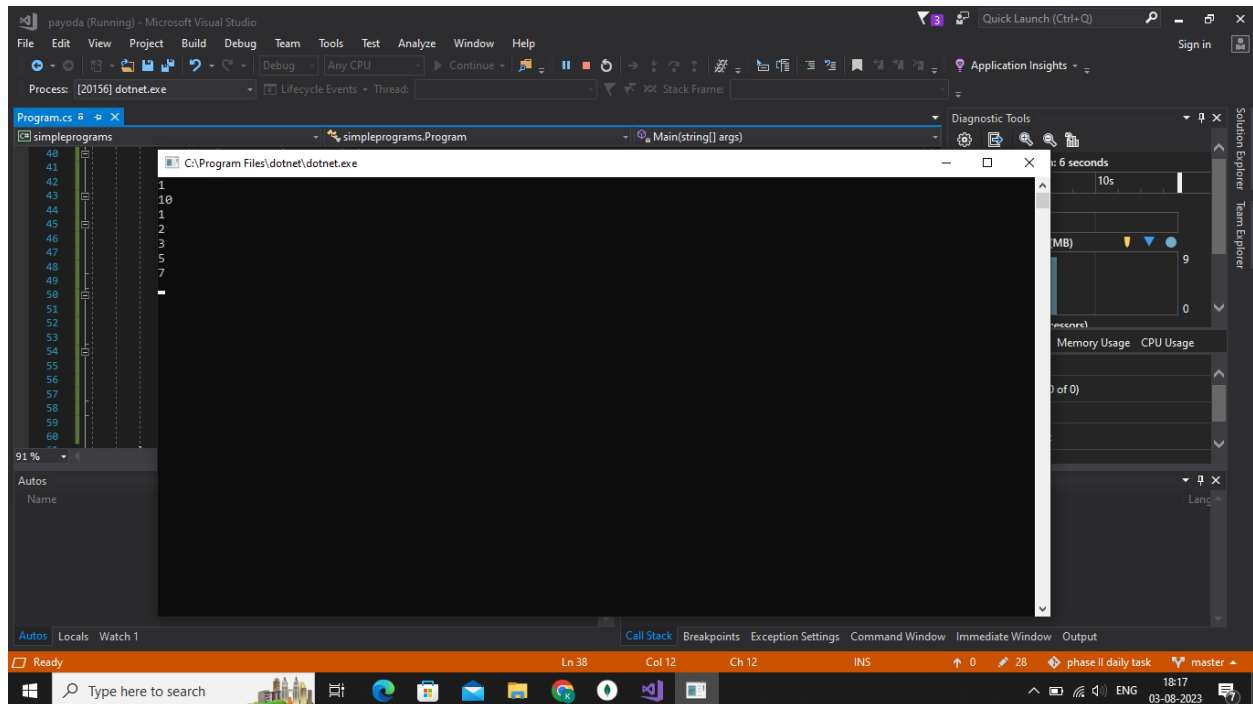
OUTPUT:



Program 3:prime number

```
int start, end;
start = Convert.ToInt32(Console.ReadLine());
end = Convert.ToInt32(Console.ReadLine());
for (int i = start; i <= end; i++)
{
    int count = 0;
    for (int j = 1; j <= i / 2; j++)
    {
        if (i % j == 0)
        {
            count++;
        }
    }
    if (i == 1)
    {
        Console.WriteLine(i);
    }
    if (count == 1)
    {
        Console.WriteLine(i);
    }
}
```

Output



Program 4: Real number

```
int num, sum = 0;
num = Convert.ToInt32(Console.ReadLine());
for (int i = 1; i <= num / 2; i++)
{
    if (num % i == 0)
    {
        sum += i;
    }
}

if (sum == num)
{
    Console.WriteLine("Perfect Number");
}
else
{
    Console.WriteLine(" Not an Perfect Number");
}
Console.ReadLine();
```

OUTPUT:

