### **DAY 4: DAILY TASK**

### MonogoDB:

```
Microsoft Windows (Version 10.0.22621.1992)
(C) Microsoft Corporation. All rights reserved.

C:\Users\MP>mongosh
Current Mongosh Log 10: 60Lcb36aa1U26236h5508e96
Cunnecting to: mongodb://127.0.0.1:27017/?directConnection=true&serverSelectionTimeoutMS=2000&appName=mongosh+1.8.2
Using Mongoble: 6.0.5
Using Mongoble: 6.0.5
Using Mongoble: 1.8.2

For mongosh info see: https://docs.mongodb.com/mongodb-shell/

The server generated these startup warnings when booting
2023-80-807123:43:56.011+05:30: Access control is not enabled for the database. Read and write access to data and configuration is unrestricted

Enable Mongoble's free cloud-based monitoring service, which will then receive and display
metrics about your deployment (disk utilization, CPU, operation statistics, etc).

The monitoring data will be available on a Mongoble website with a unique URL accessible to you and anyone you share the URL with. Mongoble may use this information to make product improvements and to suggest Mongoble products and deployment options to you.

To enable free monitoring, run the following command: db.enableFreeMonitoring()
To permanently disable this reminder, run the following command: db.disableFreeMonitoring()
To permanently disable this reminder, run the following command: db.disableFreeMonitoring()

test> show dbs
admin 40.00 KiB
corfig 40.
```

### **Shell commands:**

Microsoft Windows [Version 10.0.22621.1992]

(c) Microsoft Corporation. All rights reserved.

C:\Users\HP>mongosh

Current Mongosh Log ID: 64cb30aa1426b23fbf5d0e96

Connecting to:

mongodb: //127.0.0.1:27017/? direct Connection = true & server Selection Time out MS = 2000 & appNantage for the connection of the conne

me=mongosh+1.8.2

Using MongoDB: 6.0.5 Using Mongosh: 1.8.2

For mongosh info see: https://docs.mongodb.com/mongodb-shell/

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The server generated these startup warnings when booting

2023-08-02T23:43:56.011+05:30: Access control is not enabled for the database. Read and write access to data and configuration is unrestricted

-----

-----

Enable MongoDB's free cloud-based monitoring service, which will then receive and display

metrics about your deployment (disk utilization, CPU, operation statistics, etc).

The monitoring data will be available on a MongoDB website with a unique URL accessible to you

and anyone you share the URL with. MongoDB may use this information to make product improvements and to suggest MongoDB products and deployment options to you.

To enable free monitoring, run the following command: db.enableFreeMonitoring()
To permanently disable this reminder, run the following command: db.disableFreeMonitoring()

-----

```
test> show dbs
admin 40.00 KiB
config 84.00 KiB
local 72.00 KiB
test> show dbs
Sample 8.00 KiB
admin 40.00 KiB
config 72.00 KiB
local 72.00 KiB
test> use Sample
switched to db Sample
Sample> db
Sample
Sample> use Payoda
switched to db Payoda
Payoda> bd.createCollection("Employees");
ReferenceError: bd is not defined
Payoda> db.createCollection("Employees");
{ ok: 1 }
Payoda > db.Employees.insertOne({name:"Yogesh"})
{
 acknowledged: true,
 insertedId: ObjectId("64cb3d341426b23fbf5d0e97")
Payoda> db.Employees.insertMany({name:"Ram"},{name:"Harsh"},{name:"Sanjai"})
MongoInvalidArgumentError: Argument "docs" must be an array of documents
Payoda> db.Employees.insertMany([{name:"Ram"},{name:"Harsh"},{name:"Sanjai"}])
 acknowledged: true,
 insertedIds: {
  '0': ObjectId("64cb3eff1426b23fbf5d0e98"),
  '1': ObjectId("64cb3eff1426b23fbf5d0e99"),
  '2': ObjectId("64cb3eff1426b23fbf5d0e9a")
```

```
}
Payoda > db.Employees.find()
 { _id: ObjectId("64cb3d341426b23fbf5d0e97"), name: 'Yogesh' },
 { id: ObjectId("64cb3eff1426b23fbf5d0e98"), name: 'Ram' },
 { _id: ObjectId("64cb3eff1426b23fbf5d0e99"), name: 'Harsh' },
 { id: ObjectId("64cb3eff1426b23fbf5d0e9a"), name: 'Sanjai' }
Payoda > db.Employees.find({name:"ar"})
Payoda> db.Employees.find({name:"Harsha"})
Payoda > db.Employees.find({name:"Harsh"})
[ { id: ObjectId("64cb3eff1426b23fbf5d0e99"), name: 'Harsh' } ]
Payoda> db.Employees.updateOne({name:"Harsh"},{$set:{name:"Jaya"}})
 acknowledged: true,
 insertedId: null,
 matchedCount: 1,
 modifiedCount: 1,
 upsertedCount: 0
Payoda > db.Employees.find()
 { id: ObjectId("64cb3d341426b23fbf5d0e97"), name: 'Yogesh' },
 { _id: ObjectId("64cb3eff1426b23fbf5d0e98"), name: 'Ram' },
 { id: ObjectId("64cb3eff1426b23fbf5d0e99"), name: 'Jaya' },
 { _id: ObjectId("64cb3eff1426b23fbf5d0e9a"), name: 'Sanjai' }
Payoda> db.Employees.updateOne({name:"Jaya"},{$set:{name:"Jayan"}},{upsert:true})
 acknowledged: true,
 insertedId: null,
 matchedCount: 1,
 modifiedCount: 1,
 upsertedCount: 0
Payoda > db.Employees.find()
 { id: ObjectId("64cb3d341426b23fbf5d0e97"), name: 'Yogesh' },
 { _id: ObjectId("64cb3eff1426b23fbf5d0e98"), name: 'Ram' },
 { id: ObjectId("64cb3eff1426b23fbf5d0e99"), name: 'Jayan' },
 { _id: ObjectId("64cb3eff1426b23fbf5d0e9a"), name: 'Sanjai' }
```

```
Payoda> db.Employees.updateOne({name:"Jaya"},{$set:{name:"Jayan"}},{upsert:true})
 acknowledged: true,
 insertedId: ObjectId("64cb4a116d206c62ba7f4e3d"),
 matchedCount: 0,
 modifiedCount: 0,
 upsertedCount: 1
Payoda> db.Employees.find()
 { _id: ObjectId("64cb3d341426b23fbf5d0e97"), name: 'Yogesh' },
 { id: ObjectId("64cb3eff1426b23fbf5d0e98"), name: 'Ram' },
 { _id: ObjectId("64cb3eff1426b23fbf5d0e99"), name: 'Jayan' },
 { _id: ObjectId("64cb3eff1426b23fbf5d0e9a"), name: 'Sanjai' },
 { _id: ObjectId("64cb4a116d206c62ba7f4e3d"), name: 'Jayan' }
Payoda > db.Employees.deleteOne({name:"Jayan"})
{ acknowledged: true, deletedCount: 1 }
Payoda > db.Employees.find()
 { _id: ObjectId("64cb3d341426b23fbf5d0e97"), name: 'Yogesh' },
 { id: ObjectId("64cb3eff1426b23fbf5d0e98"), name: 'Ram' },
 { id: ObjectId("64cb3eff1426b23fbf5d0e9a"), name: 'Sanjai' },
 { _id: ObjectId("64cb4a116d206c62ba7f4e3d"), name: 'Jayan' }
Payoda > db.Employees.deleteMany()
MongoshInvalidInputError: [COMMON-10001] Missing required argument at position 0
(Collection.deleteMany)
Payoda> db.Employees.deleteMany({})
{ acknowledged: true, deletedCount: 4 }
Payoda > db.Employees.find()
Payoda>
db.Employees.insertMany([{name:"Ram"},{name:"Harsh"},{name:"Sanjai"},{name:"Jaya"}])
{
 acknowledged: true,
 insertedIds: {
  '0': ObjectId("64cb4ae01426b23fbf5d0e9b"),
  '1': ObjectId("64cb4ae01426b23fbf5d0e9c"),
  '2': ObjectId("64cb4ae01426b23fbf5d0e9d"),
  '3': ObjectId("64cb4ae01426b23fbf5d0e9e")
}
```

```
Payoda > db.Employees.find()
 { id: ObjectId("64cb4ae01426b23fbf5d0e9b"), name: 'Ram' },
 { id: ObjectId("64cb4ae01426b23fbf5d0e9c"), name: 'Harsh' },
 { _id: ObjectId("64cb4ae01426b23fbf5d0e9d"), name: 'Sanjai' },
 { id: ObjectId("64cb4ae01426b23fbf5d0e9e"), name: 'Jaya' }
Payoda>
db.Employees.insertMany([{name:"Ram",age:20},{name:"Harsh",age:20},{name:"Sanjai",age:30
},{name:"Jaya",age:80}])
 acknowledged: true,
 insertedIds: {
  '0': ObjectId("64cb4be61426b23fbf5d0e9f"),
  '1': ObjectId("64cb4be61426b23fbf5d0ea0"),
  '2': ObjectId("64cb4be61426b23fbf5d0ea1"),
  '3': ObjectId("64cb4be61426b23fbf5d0ea2")
 }
Payoda > db.Employees.find()
 { _id: ObjectId("64cb4ae01426b23fbf5d0e9b"), name: 'Ram' },
 { id: ObjectId("64cb4ae01426b23fbf5d0e9c"), name: 'Harsh' },
 { id: ObjectId("64cb4ae01426b23fbf5d0e9d"), name: 'Sanjai' },
 { _id: ObjectId("64cb4ae01426b23fbf5d0e9e"), name: 'Jaya' },
 { id: ObjectId("64cb4be61426b23fbf5d0e9f"), name: 'Ram', age: 20 },
 { _id: ObjectId("64cb4be61426b23fbf5d0ea0"), name: 'Harsh', age: 20 },
  id: ObjectId("64cb4be61426b23fbf5d0ea1"),
  name: 'Sanjai',
  age: 30
 },
 { _id: ObjectId("64cb4be61426b23fbf5d0ea2"), name: 'Jaya', age: 80 }
Payoda > db. Employees. find()
 { _id: ObjectId("64cb4ae01426b23fbf5d0e9b"), name: 'Ram' },
 { id: ObjectId("64cb4ae01426b23fbf5d0e9c"), name: 'Harsh' },
 { _id: ObjectId("64cb4ae01426b23fbf5d0e9d"), name: 'Sanjai' },
 { _id: ObjectId("64cb4ae01426b23fbf5d0e9e"), name: 'Jaya' },
 { id: ObjectId("64cb4be61426b23fbf5d0e9f"), name: 'Ram', age: 20 },
 { _id: ObjectId("64cb4be61426b23fbf5d0ea0"), name: 'Harsh', age: 20 },
  id: ObjectId("64cb4be61426b23fbf5d0ea1"),
```

```
name: 'Sanjai',
  age: 30
 },
 { _id: ObjectId("64cb4be61426b23fbf5d0ea2"), name: 'Jaya', age: 80 }
Payoda > db.Employees.find()
 { _id: ObjectId("64cb4ae01426b23fbf5d0e9b"), name: 'Ram' },
 { _id: ObjectId("64cb4ae01426b23fbf5d0e9c"), name: 'Harsh' },
 { id: ObjectId("64cb4ae01426b23fbf5d0e9d"), name: 'Sanjai' },
 { id: ObjectId("64cb4ae01426b23fbf5d0e9e"), name: 'Jaya' },
 { _id: ObjectId("64cb4be61426b23fbf5d0e9f"), name: 'Ram', age: 20 },
 { id: ObjectId("64cb4be61426b23fbf5d0ea0"), name: 'Harsh', age: 20 },
  id: ObjectId("64cb4be61426b23fbf5d0ea1"),
  name: 'Sanjai',
  age: 30
 },
 { _id: ObjectId("64cb4be61426b23fbf5d0ea2"), name: 'Jaya', age: 80 }
Payoda > db.Employees.deleteMany({})
{ acknowledged: true, deletedCount: 8 }
Payoda>
db.Employees.insertMany([{name:"Ram",age:20},{name:"Harsh",age:20},{name:"Sanjai",age:30
},{name:"Jaya",age:80}])
 acknowledged: true,
 insertedIds: {
  '0': ObjectId("64cb4c0a1426b23fbf5d0ea3"),
  '1': ObjectId("64cb4c0a1426b23fbf5d0ea4"),
  '2': ObjectId("64cb4c0a1426b23fbf5d0ea5"),
  '3': ObjectId("64cb4c0a1426b23fbf5d0ea6")
}
Payoda > db.Employees.find()
 { _id: ObjectId("64cb4c0a1426b23fbf5d0ea3"), name: 'Ram', age: 20 },
 { id: ObjectId("64cb4c0a1426b23fbf5d0ea4"), name: 'Harsh', age: 20 },
  _id: ObjectId("64cb4c0a1426b23fbf5d0ea5"),
  name: 'Sanjai',
  age: 30
 { _id: ObjectId("64cb4c0a1426b23fbf5d0ea6"), name: 'Jaya', age: 80 }
```

```
Payoda> db.Employees.find({age:{$gt:25}});
Payoda> show dbs
Payoda 72.00 KiB
Sample 40.00 KiB
admin 40.00 KiB
config 96.00 KiB
local 72.00 KiB
Payoda > use Payoda
already on db Payoda
Payoda>
db.Employees.insertMany([{name:"Ram",age:20},{name:"Harsh",age:20},{name:"Sanjai",age:30
},{name:"Jaya",age:80}])
 acknowledged: true,
 insertedIds: {
  '0': ObjectId("64cb50ea1426b23fbf5d0ea7"),
  '1': ObjectId("64cb50ea1426b23fbf5d0ea8"),
  '2': ObjectId("64cb50ea1426b23fbf5d0ea9"),
  '3': ObjectId("64cb50ea1426b23fbf5d0eaa")
 }
Payoda > db.Employees.find()
 { id: ObjectId("64cb4c0a1426b23fbf5d0ea3"), name: 'Ram', age: 20 },
 { _id: ObjectId("64cb4c0a1426b23fbf5d0ea4"), name: 'Harsh', age: 20 },
  _id: ObjectId("64cb4c0a1426b23fbf5d0ea5"),
  name: 'Sanjai',
  age: 30
 },
 { _id: ObjectId("64cb4c0a1426b23fbf5d0ea6"), name: 'Jaya', age: 80 },
 { _id: ObjectId("64cb50ea1426b23fbf5d0ea7"), name: 'Ram', age: 20 },
 { _id: ObjectId("64cb50ea1426b23fbf5d0ea8"), name: 'Harsh', age: 20 },
  _id: ObjectId("64cb50ea1426b23fbf5d0ea9"),
  name: 'Sanjai',
  age: 30
 { id: ObjectId("64cb50ea1426b23fbf5d0eaa"), name: 'Jaya', age: 80 }
Payoda > db.Employees.deleteMany({})
{ acknowledged: true, deletedCount: 8 }
```

```
Pavoda>
db.Employees.insertMany([{name:"Ram",age:20},{name:"Harsh",age:20},{name:"Sanjai",age:30
},{name:"Jaya",age:80}])
 acknowledged: true,
 insertedIds: {
  '0': ObjectId("64cb51011426b23fbf5d0eab"),
  '1': ObjectId("64cb51011426b23fbf5d0eac"),
  '2': ObjectId("64cb51011426b23fbf5d0ead"),
  '3': ObjectId("64cb51011426b23fbf5d0eae")
 }
}
Payoda > db.Employees.find()
 { id: ObjectId("64cb51011426b23fbf5d0eab"), name: 'Ram', age: 20 },
 { _id: ObjectId("64cb51011426b23fbf5d0eac"), name: 'Harsh', age: 20 },
  id: ObjectId("64cb51011426b23fbf5d0ead"),
  name: 'Sanjai',
  age: 30
 },
 { _id: ObjectId("64cb51011426b23fbf5d0eae"), name: 'Jaya', age: 80 }
Payoda> db.Employees.find({age:{$gt:25}},{name:0});
 { id: ObjectId("64cb51011426b23fbf5d0ead"), age: 30 },
 { id: ObjectId("64cb51011426b23fbf5d0eae"), age: 80 }
Payoda > db.Employees.find({age:{$gt:25}},{age:1});
 { _id: ObjectId("64cb51011426b23fbf5d0ead"), age: 30 },
 { id: ObjectId("64cb51011426b23fbf5d0eae"), age: 80 }
Payoda > db.Employees.find({age:{$gt:25}},{name:2});
 { _id: ObjectId("64cb51011426b23fbf5d0ead"), name: 'Sanjai' },
 { _id: ObjectId("64cb51011426b23fbf5d0eae"), name: 'Jaya' }
Payoda > db.Employees.find({name:"Ram"},{age:{$gt:10,$lt:21}});
MongoServerError: FieldPath field names may not start with '$'. Consider using $getField or
$setField.
Payoda> db.Employees.find([{name:"Ram"},{age:{$gt:10,$lt:21}}]);
MongoInvalidArgumentError: Query filter must be a plain object or ObjectId
Payoda> db.Employees.find({or:[{name:"Ram"},{age:{$gt:10,$lt:21}}]});
```

```
Payoda> db.Employees.find({or:[{name:"Ram"},{age:{$gt:10,$lt:21}}]});
```

Payoda> db.Employees.find({or:[{name:"Ram"},{age:{\$gt:10,\$lt:21}}]});

# **C# programs**

# **Program 1:**

int num1, num2, rem;

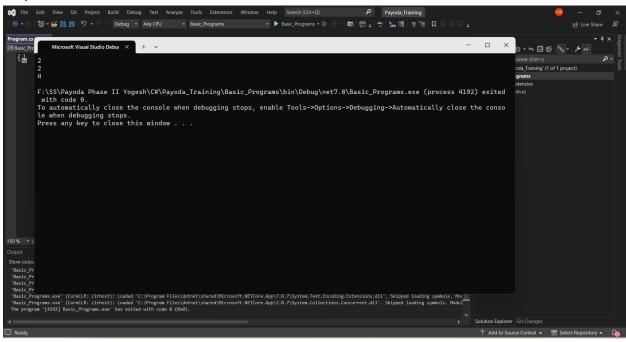
num1 = Convert.ToInt32(Console.ReadLine());

num2 = Convert.ToInt32(Console.ReadLine());

rem = num1 + num2;

Console.WriteLine(rem);

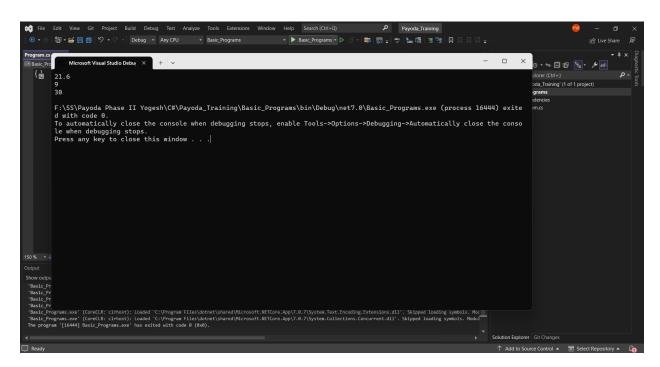
#### Output:



# Program 2:

```
double num1;
int num2, rem;
num1 = Convert.ToDouble(Console.ReadLine());
num2 = Convert.ToInt32(Console.ReadLine());
rem = (int)num1 + num2;
Console.WriteLine(rem);
```

## Output:



## Program 3:

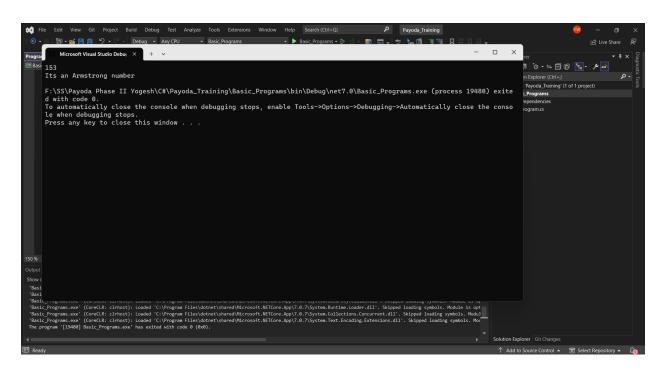
```
//Armstrong Number

int num, sum = 0;

num=Convert.ToInt32(Console.ReadLine());
int temp = num;

while(num > 0)
{
    int rem = num % 10;
    sum += rem * rem * rem;
    num /= 10;
}

if (sum == temp)
    Console.WriteLine("Its an Armstrong number");
else Console.WriteLine("Not an Armstrong number");
```



## Program 4:

To find Perfect number

```
//To find perfect number
int num1, sum = 0;
Console.WriteLine("Perfect Number");
Console.WriteLine("Enter the number to verify Perfect number: ");
num1 = Convert.ToInt32(Console.ReadLine());
int i = 1;
while(i<=num1/2)
  if (num1 % i == 0)
     sum = sum + i;
  }
  j++;
}
if (sum == num1)
  Console.WriteLine( num1+"is Perfect number");
else
  Console.WriteLine(num1 + "is not a Perfect Number");
}
```

```
Perfect Number
Enter the number to verify Perfect number:
6
6is Perfect number
F:\SS\Payoda Phase II Yogesh\C#\Payoda_Training\Basic_Programs\bin\Debug\net7.0\Basic_Programs.exe (process 9300) exited with code 0.
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .
```

### Program 6:

```
int num1, num2;
Console.WriteLine("Prime number Generators");
Console.WriteLine("Start from: ");
num1 = Convert.ToInt32(Console.ReadLine());
Console.WriteLine(" End to: ");
num2 = Convert.ToInt32(Console.ReadLine());
Console.WriteLine("The Prime numbers are: ");
for (int i = num1; i \le num2; i++)
  int val = 0;
  int j = 2;
  while(j<=i/2)
     if (i % j == 0)
       val = 1;
     j++;
  if (val == 0)
     Console.WriteLine(i);
```

// Generate Prime number between values.

### Output:

}

```
Prime number Generators

Start from:

5
    End to:
15
    The Prime numbers are:
5
    7
    11
13

F:\SS\Payoda Phase II Yogesh\C#\Payoda_Training\Basic_Programs\bin\Debug\net7.0\Basic_Programs.exe (process 20908) exite d with code 0.
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the conso le when debugging stops.
Press any key to close this window . . .
```