

---1. TOTAL PATIENTS

```
SELECT COUNT(*) AS Total_Number_Patient FROM
heart_failure_clinical_records_dataset
```

---2. AVG FOLLOW UP PERIOD (DAYS)

```
SELECT AVG (time) AS AVG_Follow_up_period from
heart_failure_clinical_records_dataset
```

---3. COMMONLY AFFECTED AGE

```
SELECT TOP 1 Age, COUNT (Age) AS Age_count FROM
heart_failure_clinical_records_dataset
GROUP BY Age
ORDER BY 2 DESC
```

---4. AVG AGE OF DECEASED PATIENTS

```
SELECT ROUND (AVG(age),0) AS Avg_Age_Deceased_Patients FROM
heart_failure_clinical_records_dataset
WHERE DEATH_EVENT=1
```

---5. AVG AGE OF SURVIVED PATIENTS

```
SELECT ROUND (AVG(age),0) AS Avg_Age_Survived_Patients FROM
heart_failure_clinical_records_dataset
WHERE DEATH_EVENT=0
```

---6. NUMBERS OF PATIENTS BY GENDER

```
SELECT CASE WHEN SEX= 0 THEN 'Female' WHEN SEX=1 THEN 'Male' END AS Gender, COUNT
(Sex) AS Numbers_of_patients
FROM heart_failure_clinical_records_dataset
GROUP BY sex
```

---7. AVG EJECTION FRACTION (%) BY DEATH EVENTS

```
SELECT CASE WHEN DEATH_EVENT=0 THEN 'Survived_Patients' WHEN DEATH_EVENT=1 THEN
'Deceased_Patients' END AS Death_Event, ROUND(AVG(ejection_fraction),0) AS
Avg_ejection_fraction
FROM heart_failure_clinical_records_dataset
GROUP BY DEATH_EVENT
```

---8 AVG CREATININE PHOSPHOKINASE (mcg/L) BY DEATH EVENTS

```
SELECT CASE WHEN DEATH_EVENT=0 THEN 'Survived_Patients' WHEN DEATH_EVENT=1 THEN
'Deceased_Patients' END AS Death_Event, ROUND(AVG(creatinine_phosphokinase),0) AS
Avg_Creatinine_Phosphokinase
FROM heart_failure_clinical_records_dataset
GROUP BY DEATH_EVENT
```

---9 NUMBER OF PATIENTS BY DEATH EVENT/MORTALITY RATE

```
SELECT CASE WHEN DEATH_EVENT=0 THEN 'Survived_Patients' WHEN DEATH_EVENT=1 THEN
'Deceased_Patients' END AS Death_Event, COUNT (DEATH_EVENT) Number_of_Patients
FROM heart_failure_clinical_records_dataset
GROUP BY CASE WHEN DEATH_EVENT=0 THEN 'Survived_Patients' WHEN DEATH_EVENT=1 THEN
'Deceased_Patients' END
```

--10. AVG PLATELET COUNT (platelets/ $\mu$ L) BY DEATH EVENTS

```
SELECT CASE WHEN DEATH_EVENT=0 THEN 'Survived_Patients' WHEN DEATH_EVENT=1 THEN
'Deceased_Patients' END AS Death_Event, ROUND(AVG(platelets), 1) AS Avg_platelets
FROM heart_failure_clinical_records_dataset
GROUP BY DEATH_EVENT
```

```

---11 AVG SERUM CREATININE (mg/dL) BY DEATH EVENTS
SELECT CASE WHEN DEATH_EVENT=0 THEN 'Survived_Patients' WHEN DEATH_EVENT=1 THEN
'Deceased_Patients' END AS Death_Event, ROUND (AVG(serum_creatinine), 1) AS
Avg_serum_creatinine
FROM heart_failure_clinical_records_dataset
GROUP BY DEATH_EVENT

---12 AVG SERUM SODIUM (mEq/L) BY DEATH EVENTS\
SELECT CASE WHEN DEATH_EVENT=0 THEN 'Survived_Patients' WHEN DEATH_EVENT=1 THEN
'Deceased_Patients' END AS Death_Event, ROUND (AVG(serum_sodium), 1) AS
Avg_serum_sodium
FROM heart_failure_clinical_records_dataset
GROUP BY DEATH_EVENT

---13. ANAEMIC PATIENTS
SELECT COUNT (Anaemia) Anaemic_patients FROM
heart_failure_clinical_records_dataset
WHERE Anaemia=1

---14. DIABETIC PATIENTS
SELECT COUNT (diabetes) Diabetic_Patients FROM
heart_failure_clinical_records_dataset
WHERE diabetes=1

---15. HYPERTENSIVE PATIENTS
SELECT COUNT (high_blood_pressure) Hypertensive_Patients FROM
heart_failure_clinical_records_dataset
WHERE high_blood_pressure=1

---16. SMOKING PATIENTS
SELECT COUNT (Smoking) smoking_patients FROM
heart_failure_clinical_records_dataset
WHERE smoking =1

```