Problem 1: Write a CRON expression that runs a job every five minutes.

Problem 2: Write a CRON expression that runs a job every hour.

Problem 3: Write a CRON expression that runs a job every day at 2:30 PM.

Problem 4: Write a CRON expression that runs a job every Monday at 8:00 AM.

Problem 5: Write a CRON expression that runs a job every month on the first day of the month at 3:00 AM.

Problem 6: Write a CRON expression that runs a job every Sunday at 7:30 PM and 10:30 PM.

Problem 7: Write a CRON expression that runs a job every 15 minutes between 8:00 AM and 10:45 PM every day.

Problem 8: Write a CRON expression that runs a job every hour on weekdays between 9:00 AM and 5:00 PM.

Problem 9: Write a CRON expression that runs a job every day at 3:00 AM.

Problem 10: Write a CRON expression that runs a job every hour during the month of January.

Problem 11: Write a CRON expression that runs a job every 30 minutes during business hours (8:00 AM to 5:00 PM) on weekdays.

Problem 12: Write a CRON expression that runs a job every hour on the 15th day of the month.

Problem 13: Write a CRON expression that runs a job every day at 6:00 PM during daylight saving time (DST) in the United States.

Problem 14: Write a CRON expression that runs a job every 5 minutes on weekdays and every 15 minutes on weekends.

Problem 15: Write a CRON expression that runs a job every 10 minutes but only between 9:00 AM and 6:00 PM on weekdays.

Problem 16: Write a CRON expression that runs a job every hour during the first half of the month. 0 \* 1-15 \* \*

Problem 17: Write a CRON expression that runs a job every 5 minutes on weekdays and every 15 minutes on weekends. 5 \* \* \* 1-5

Problem 18: Write a CRON expression that runs a job at 11:30 PM every Friday the 13th.

Problem 19: Write a CRON expression that runs a job every hour but only on even-numbered days of the month.

Problem 20: Write a CRON expression that runs a job every 5 minutes but only between 9:00 AM and 6:00 PM on weekends.

Problem 21: Write a CRON expression that runs a job at 3:30 AM every day except Saturday and Sunday.

Problem 22: Write a CRON expression that runs a job at the top of every hour between 9:00 AM and 5:00 PM on the 15th day of the month.

Problem 23: Write a CRON expression that runs a job at 8:15 AM every weekday except Friday.

Problem 24: Write a CRON expression that runs a job at 10:00 PM every day in the month of December.

Problem 25: Write a CRON expression that runs a job at the bottom of every hour (i.e., at :00 and :30 minutes past the hour) between 6:00 PM and midnight on weekdays.

Problem 26: Write a CRON expression that runs a job at 4:30 PM on the 1st and 15th days of every month.

Problem 27: Write a CRON expression that runs a job every 10 minutes on weekdays between 9:00 AM and 5:00 PM.

Problem 28: Write a CRON expression that runs a job at 12:00 PM on the 3rd Wednesday of every month.

\* 23 18 \* 3

Problem 29: Write a CRON expression that runs a job at 10:00 PM every Sunday in the months of July, August, and September.

Problem 30: Write a CRON expression that runs a job at 12:00 PM every day except Sunday in the month of July.

Problem 31: Write a CRON expression that runs a job at 11:30 PM every Friday.

Problem 32: Write a CRON expression that runs a job at 3:15 AM every day.

Problem 33: Write a CRON expression that runs a job every hour from 6:00 AM to 8:00 PM on weekdays.

Problem 34: Write a CRON expression that runs a job every 30 minutes on the 15th and 30th day of every month.

Problem 35: Write a CRON expression that runs a job every 5 minutes on the 1st day of every month.

Problem 36: Write a CRON expression that runs a job every hour on the hour from 9:00 AM to 5:00 PM on weekdays.

Problem 37: Write a CRON expression that runs a job every 15 minutes from 2:00 PM to 10:00 PM on weekends.

Problem 38: Write a CRON expression that runs a job every 10 minutes on weekdays between 8:00 AM and 3:00 PM.

Problem 39: Write a CRON expression that runs a job at 11:00 PM every day of the year.

0 11 \* \* \*

Problem 40: Write a CRON expression that runs a job every 30 minutes on the 15th and last day of every month. 30.0.15.31\*\*

Problem 36: Write a CRON expression that runs a job every hour on the hour from 9:00 AM to 5:00 PM on weekdays.

Problem 37: Write a CRON expression that runs a job every 15 minutes from 2:00 PM to 10:00 PM on weekends.

Problem 38: Write a CRON expression that runs a job every 10 minutes on weekdays between 8:00 AM and 3:00 PM.

Problem 39: Write a CRON expression that runs a job at 11:00 PM every day of the year.

0 11 \* \* \*

Problem 40: Write a CRON expression that runs a job every 30 minutes on the 15th and last day of every month.

30 0 15,31 \* \*

Problem 41: Write a CRON expression that runs a job at 12:00 PM on the first Monday of every month.

0 24 1 \* \*

Problem 42: Write a CRON expression that runs a job every 5 minutes on the first 10 days of January.

501000

Problem 43: Write a CRON expression that runs a job at 4:30 PM on weekdays in July and August. 30.16 \* 6.7 \*

Problem 44: Write a CRON expression that runs a job at 12:00 AM on the first day of every quarter (January, April, July, and October).

0 0 0 0,3,6,9 0

Problem 45: Write a CRON expression that runs a job at 8:00 AM every day, except for the last day of the month.

0829\*\*

Problem 46: Write a CRON expression that runs a job every 2 hours between 10:00 PM and 6:00 AM. 0 4\*\*\*

Problem 47: Write a CRON expression that runs a job at 1:30 PM on the second to last Friday of every month.

30 13 0 \* 5

Problem 48: Write a CRON expression that runs a job at 5:30 PM on the first day of every month.  $\frac{30\ 17\ 1}{}^*$ 

Problem 49: Write a CRON expression that runs a job at 3:00 AM on weekdays in the month of November. 0.3 \* 11.1-5

Problem 50: Write a CRON expression that runs a job every 10 minutes between 9:00 AM and 5:00 PM on weekdays.

10 9-17 \* \* 1-5