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***LAB WORK 01***

QUESTION 01)

PROBLEM ANALYSIS CHART

|  |  |  |
| --- | --- | --- |
| DATA | PROCESS | OUTPUT |
| Number of hours worked | Gross Pay = Number of hours worked \* pay rate | Gross Pay |
| Rate of Pay |

QUESTION 02)

**IPO**

|  |  |  |
| --- | --- | --- |
| INPUT | PROCESS | OUTPUT |
| Distance in Km | Total Distance in Km= (Distance in miles \* 1.609) + Distance in Km already given | Total Distance in Km |
| Distance in miles |

QUESTION 03)

**IPO**

|  |  |  |
| --- | --- | --- |
| INPUT | PROCESS | OUTPUT |
| Distance travelled in miles | Car’s gas mileage = Distance travelled in miles/ Gas used in gallon | Car’s gas mileage in miles per gallon |
| Gas used in gallon |

QUESTION 04)

START

INPUT UNIT PRICE OF PRODUCT= NUM 1

STOP

PRINT (TOTAL SALES )

TOTAL SALES= NUM 1 + NUM 2

INPUT QUANTITY OF PRODUCT SOLD =NUM 2

***LAB TASK 02)***

QUESTION 01)

ALGORITHM

START

STEP 1: Start

STEP 2: Input Number

STEP 3: If number is divisible by 2

INPUT NUMBER

STEP 4: If YES than display even number

STEP 4: Else Display odd number

STEP 5: END

IF NUMBER IS % 2

DISPLAY EVEN NUMBER

DISPLAY ODD NUMBER

NO

YES

QUESTION 02)

START

REPAIR IT

IF IT IS BURNED?

IF IT IS PLUGED IN?

IF IT IS WORKING?

PLUG IN

REPLACE IT

GO TO LAMP

YES

NO

NO

YES

NO

YES

QUESTION 3)

END

PRINT ‘B’ IS THE LARGEST NUMBER

PRINT ‘C’ IS THE LARGEST NUMBER

PRINT ‘A’ IS THE LARGEST NUMBER

A>C

B>C

A>B

READ THREE NUMBERS AS A,B,C

START

ALGORITHM

Step 1) Start

Step 2: Input three number as A,B,C

Step 3: If A is greater than B

Step 4: If A is greater than C

Step 5: Print(A is the largest number)

Step 6: If B is greater than C

Step 7: Print (B is the largest number)

Step 8: Else C is the largest number

QUESTION 04)

END

PRINT(SEMESTER IS FALL)

PRINT(SEMESTER IS SUMMER)

IS IT 6 AND 7 MONTH

PRINT SEMESTER IS SPRING

IS IT BETWEEN 1 TO 5 MONTH

NUMBER OF MONTH OUT OF 12 MONTH

START

YES

NO

YES

NO

QUESTION 05)

DISPLAY TABLE

TABLE = N \*COUNTER

COUNTER = COUNT + 1

COUNTER = 0

INPUT NUMBER N

START

ALGORITHM

Step 1: Start

Step 2: Input number as N

Step 3: Set counter to 0

Step 4: Increase the counter value by 1

Step 5: Multiply the value of N by the value of counter

Step 6: Display table

Step 7: Repeat the process from Step 4

Step 8: END

QUESTION 06)

ALGORITHM

Step 1: Start

Step 2: Input number

Step 3: Is the input number an integer

Step 4: Is the input number great than or equal to 1

Step5: If not then ‘i’ is equals to 2

Step 6: Else print prime number are integers greater than 1

Step 7: If ‘i’ is greater than or equals to input

Step 8: Print Input number is a prime number

Step 9: Else Divide input number by ‘i’

Step 10: If there is a reminder

Step 11: Then add 1 to the value of ’i’ and repeat the procedure from Step 7

Step 12: Else input number is not a prime number.

Step 13: END

REMINDER?

IS IT A INTEGER

END

EVENLY DIVIDED NUMBER ARE NOT PRIME

I=I+1

INPUT NUM % I

INPUT NUM IS A PRIME NUMBER

I>=NUM

I=2

NUM >=1

PRIME NUM ARE INTEGER>1

INPUT NUM

START

NO

YES

NO

YES

YES

NO

NO

YES

QUESTION 07)

LIGHTS TURN ON

SERIAL BIT STREAM DETECTED

IS 101 SEQUENCE DETECTED

RUN SOFTWARE PROGRAM

START

NO

YES

ALGORITHM

Step 1: Start

Step 2: Run the software program

Step 3: Is 101 sequence detected

Step 4: Serial bit stream detected

Step 5: light turn on

Step 6: Else End

Step 7: End