भारतीय प्रौद्योगिकी संस्थान हैदराबाद
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Assembly Assignment

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I. ABSTRACT

The Karnaugh map represents a logic function f. The minimal sum-of-products expression for f is derived by identifying the prime implicants and essential prime implicants in the Karnaugh map. The resulting expression is a simplified representation of the logic function, minimizing the number of literals and logic gates required for implementation.

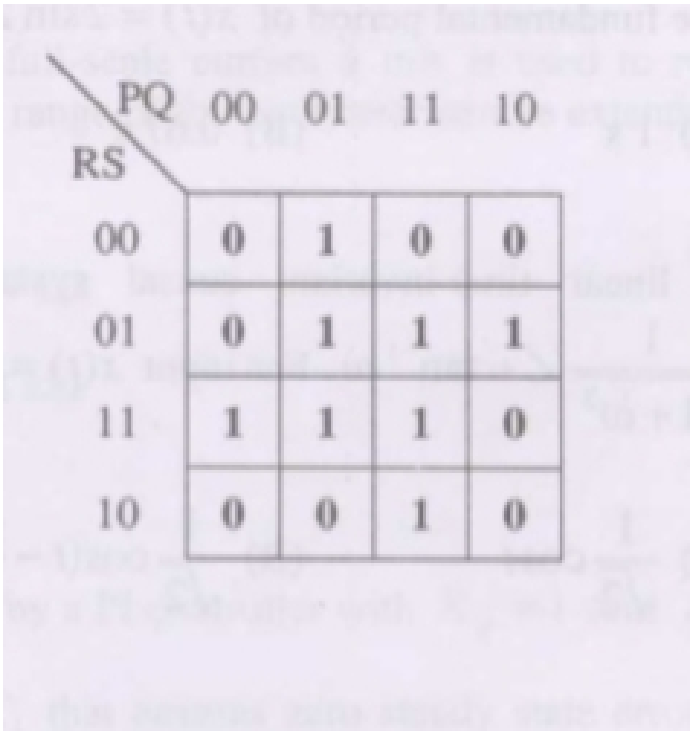

Fig. 1.

II. COMPONENTS

The required components list is given in Table:I.,

components	value	quality
Led's		4
Arduino	UNO	1
jumperwires		50
Breadboard		1

TABLE I

III. PROCEDURE

1) Connect the Led's to the Arduino uno.
2) Give the inputs manually using jumper wires.
3) connect the Arduino using USB device.
4) Execute the arduino code in nvim editor using avra filename.tex command.
5) After upload the code into hardware setup using arduino IDE platform.

IV. RESULTS

1) Download the code given in the link below and execute them to see the output as shown in Fig.3.
2) https://github.com/Akhilathalla/Akhila/blob/main/assembly/hello.asm

V. CONCLUSION

Hence implementation of assembly using LED's is done and verified through truth table.

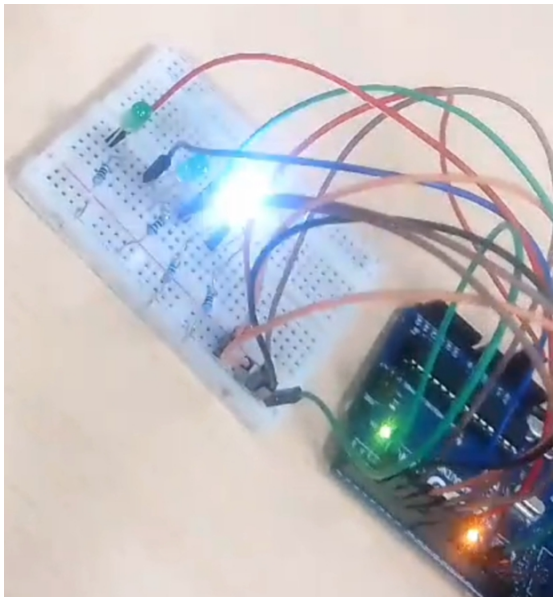

Fig. 2.