

BASAVARAJESWARI GROUP OF INSTITUTIONS

Ballari Institute of Technology & Management

AUTONOMOUS INSTITUTE UNDER VISVESVARAYA TECHNOLOGICAL UNIVERSITY JNANASANGAMA,
BELAGAVI 590018



Internship Report On “PATTERN PROGRAM”

Submitted in partial fulfillment of the requirements for the award of degree of

Bachelor of Engineering In COMPUTER SCIENCE & ENGINEERING

Submitted by
SHALINI G
3BR21CS144

Internship Carried Out
By
“**DESTINATION TECHNOLOGIES**”
BANGALORE

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BALLARI INSTITUTE OF TECHNOLOGY & MANAGEMENT

NACC Accredited Institution*

(Recognized by Govt.of Karnataka, approved by AICTE, New
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2022-2023

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE

This is to certify that the Internship entitled **"PATTERN PROGRAM"** has been successfully completed by **SHALINI G** bearing USN **3BR21CS144** a bonafide student of Ballari Institute of Technology and Management, Ballari. For the partial fulfillment of their requirements for the **Bachelor's Degree in Computer Science and Engineering** of the VISVESVARAYA TECHNOLOGICAL UNIVERSITY, Belagavi during the academic year 2022-2023.

Signature of Internship
Co-ordinate

Signature of HOD

Dr. R N Kulkarni

DECLARATION

I, **SHALINI G**, second year student of Computer Science and Engineering, Ballari Institute of Technology, Ballari, declare that Internship entitled **“PATTERN PROGRAM”** is a part of Internship Training successfully carried out by **“DESTINATION TECHNOLOGIES” Bangalore**, at **“BITM,BALLARI”**. This report is submitted in partial fulfillment of the requirements for the award of the degree, Bachelor of Engineering Computer Science and Engineering of the Visvesvaraya Technological University, Belagavi.

Date

Signature of Student

Place: Ballari

ACKNOWLEDGEMENT

The satisfactions that accompany the successful completion of my internship on “**PATTERN PROGRAM**” would be incomplete without the mention of people who made it possible, whose noble gesture, affection, guidance, encouragement and support crowned my efforts with success. It is my privilege to express my gratitude and respect to all those who inspired me in the completion of my internship.

I am grateful to our respective coordinator “**Mr. Hayath.T.M**” for his noble gesture, support co-ordination and valuable suggestions given to me in the completion of Internship. I also thank **Dr. R N Kulkarni**, H.O.D. Department of Computer Science and Engineering for extending all his valuable support and encouragement.

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About Company: **Destination Technologies**

Locations: Bangalore, Vijayawada, Hyderabad.

Destination Technologies is a one-stop solution for Graduates looking to get skilled and be a part of the IT Industry. We train the candidates as per the expectations of the IT Industry in various technologies like C, C++, Java, Python, .NET and Manual / Automation Testing.

We are passionate about providing indispensable career guidance and core competency skills to budding youngsters so that they can keep abreast of the latest developments in the world of dynamic and challenging careers. Join hands with us to build a skilled nation.

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1. Java Full Stack Course
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7. Web Technologies
8. Soft skill Course
9. C++
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11. Projects and internships.

We are passionate about providing indispensable career guidance and core competency skills to budding youngsters so that they can keep abreast of the latest developments in the world of dynamic and challenging careers. Join hands with us to build a skilled nation.

CONCLUSION

The pattern program helps us to understand the concept of for loops, arrays, and functions in a very interesting way. The program displays a person's name in one's desired pattern. This method can also be used to print different patterns for different purposes. This can be use to make a presentation more interesting and also helps in increasing our logical thinking.

ABSTRACT

This program defines functions to print individual letters S,H,A,L,I,N,I using a 7x5 matrix of asterisks and spaces. The main function calls these functions and prints out the letters side-by-side with a gap between them using a nested loop. The program does not take any user input and simply prints out the letters in a fixed format. It also does not have any error checking or handling.

INTRODUCTION

This program prints out the letters "SHALINI" in a stylized format using asterisks. The program defines global 2D arrays printS, printH, printA, printL, printI, printN, printI to store the patterns for each letter. Then, there are individual functions for each letter that populate their corresponding arrays with the appropriate asterisks to form the letter. Finally, in the main() function, the program prints out each row of the stylized letters by iterating through each column of each row of each letter's pattern array and printing the corresponding character (either an asterisk or a space). The gap() function is used to add a gap of 5 spaces between each letter.

MODULE DESCRIPTION

The program is a C program that uses nested loops to print out the letters S,H,A,L,I,N,I in a certain style. The program defines seven 7x5 arrays printS, printH, printA, printL, printI, printN, printI and uses functions to populate them with asterisks (*) and spaces () in certain patterns that form the letters. The main function then uses nested loops to print out the letters in a horizontal line with a gap of five spaces between each letter. Overall, the program seems to be a simple demonstration of how to print out letters using nested loops and arrays in C.

ALGORITHM

This program generates an output of the letters “SHALINI” in a stylized format using ASCII art. The letters are created as arrays of asterisks (*) and spaces () and then printed out using a series of nested loops. The program also includes a function for creating a gap between the letters.

Here is a step-by-step breakdown of the program:

Step 1: The program starts with the global declaration of seven 7x5 arrays to hold the ASCII art for each letter.

Step 2: Next, there are seven functions defined for each letter: S(),H(),A(),L(),I(),N(),I(). Each function fills its respective array with asterisks and spaces to form the letter.

Step 3: The gap() function is defined to create a gap between each letter in the output. It uses a nested loop to print out five spaces.

Step 4: In the main function, the seven letter functions are called to fill their respective arrays.

Step 5: Finally, there is a nested loop that prints out each row of the ASCII art for each letter, with gaps between each letter. The innermost loop prints out each character in the row, using the respective array for each letter.

Step 6: The program ends with a newline character to improve the readability of the output.

OUTPUT

```
*****  *  *      ***      *      *****  *  *      *****
*        *  *      *  *      *        *      **  *      *
*        *  *      *  *      *        *      *  *  *      *
*****  *****  *****  *      *      *  *  *      *
      *      *  *      *  *      *      *      *  *  *      *
      *      *  *      *  *      *      *      *  **      *
*****  *  *      *  *      *****  *****  *      *      *****
```

Process returned 0 (0x0) execution time : 0.041 s

Press any key to continue.

|

DISCUSSIONS

This program prints out the word letters "SHALINI" in a stylized font in the console using ASCII art. It accomplishes this by defining separate 2D arrays for each letter, and then iterating through each row of the arrays to print out the entire word. The program defines functions for each letter, which set the appropriate values in the corresponding 2D array. For example, the "S" function sets the values to print an "S" character in the array. The main function then calls each of these functions, and iterates through each row of each array to print out the word. The program also includes a function called "gap" that prints out a space, which is used to create space between the letters. Overall, this program is a simple example of how ASCII art can be used to stylize text in the console.

REFERENCES

- <https://www.scaler.com/topics/pattern-program-in-c/>
- <https://www.educba.com/patterns-in-c-programming/>