PROJECT TITLE:-

PROJECT 1

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PROGRAM NAME:- BACHELORS OF TECHNOLOGY

(COMPUTER SCIENCE AND TECHNOLOGY)

SUBMITTED TO:

DR. PARNIKA BHAT

SCHOOL OF COMPUTER SCIENCE ENGINEERING

LOVELY PROFESSIONAL UNIVERSITY

A PROJECT FILE ON PROJECT 1:

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ACKNOWLEDGEMENT:

I WOULD LIKE TO EXPRESS MY SPECIAL THANKS OF GRATITUDE TO MY TEACHER "DR. PARNIKA BHAT"

FOR HER ABLE GUIDANCE AND SUPPORT IN COMPLETING AND SUPPORT IN COMPLETING THIS PROJECCT.

 I WOULD ALSO LIKE TO EXTEND MY PROFOUND GRATITUDE TO HOD OF COMPUTER SCIENCE DEPARTMENT DR. SANJAY MODI(DEAN) OF LOVELY PROFESSIONAL UNIVERSITY FOR THEIR CONTRIBUTION TO THE COMPLETION OF MY PROJECT.

 AND THANKS TO ALL WHO HELPED ME DURING THE PROJECT.

INTRODUCTION:

PYTHON IS AN INTERPRETED, OBJECT-ORIENTED, HIGH-LEVEL PROGRAMMING LANGUAGE WITH DYNAMIC SEMANTICS. ITS HIGH-LEVEL BUILT IN DATA STRUCTURES, COMBINED WITH DYNAMIC TYPING AND DYNAMIC BINDING, MAKE IT VERY ATTRACTIVE FOR RAPID APPLICATION DEVELOPMENT, AS WELL AS FOR USE AS A SCRIPTING OR GLUE LANGUAGE TO CONNECT EXISTING COMPONENTS TOGETHER. PYTHON IS SIMPLE, EASY TO LEARN SYNTAX EMPHASIZES READABILITY AND THEREFORE REDUCES THE COST OF PROGRAM MAINTANCE. PYTHON SUPPORT MODULES AND PACKAGES, WHICH ENCOURAGES PROGRAM MODULARITY AND CODE REUSE. THE PYTHON INTERPRETERAND THE ENTENSIVE STANDARD LIBRARY ARE AVAILABLE IN SOURCE OR BINARRY FORM WITHOUT CHARGE FOR ALL MAJOR PLATFORMS, AND CAN BE FREELY DISTRIBUTED.

OFTEN, PROGRAMMERS FALL IN LOVE WITH PYTHON BECAUSE OF THE INCREASED PRODUCTIVITY IT PROVIDES. SINCE THERE IS NO COMPILATION STEP, THE EDIT-TEST-DEBUG CYCLE IS INCREDIBLY FAST. DEBUGGING PYTHON PROGRAMS IS EASY: A BUG OR

BAD INPUT WILL NEVER CAUSE A SEGMENTATION FAULT. INSTEAD, WHEN THE INTERPRETER DISCOVERS AN ERROR, IT RAISES AN EXCEPTION. WHEN THE INTERPRETER DISCOVERS AN ERROR, IT RAISES AN EXCEPTION.WHEN THE PROGRAM DOES NOT CATCH THE EXCEPTION, THE INTERPRETER PRINTS A STACK TRACE. A SOURCE LEVEL DEBUGGER ALLOWS INSPECTION OF LOCAL AND GLOBAL VARIABLE, EVALUATION OF ARBITARY EXPRESSION, SETTING BREAKPOINTS, STEPPING THROUGH THE CODE A LINE AT A TIME, AND SO ON. THE DEBUGGER IS WRITTEN IN PYTHON ITSELF, TESTIFYING TO PYTHON INTROSPECTIVE POWER. ON THE OTHER, OFTEN HAND, OFTEN THE QUICKEST WAY TO DEBUG A PROGRAM IS TO ADD A FEW PRINT STATEMENTS TO THE SOURCE: THE FAST EDIT-TEST-DEBUG CYCLE MAKES THS SIMPLE APPROACH VERY EFFECTIVE.

FEATURES OF PYTHON:

*COMPATIBLE WITH A VARIETY OF PLATFORMS INCLUDING WINDOWS, MAC, LINUX, AND OTHERS.

*USES A SIMPLE SYNTAX COMPARABLE TO THE ENGLISH LANGUAGE THAT LETS DEVELOPERS USE FEWER LINES THAN OTHER PROGRAMMING LANGUAGE.

*OPERATES ON AN INTERPRETER SYSTEM THAT ALLOWS CODE TO BE EXECUTED IMMEDIATELY, FAST-TRACKING PROTOTYPING.

*CAN BE HANDLED IN A PROCEDURAL, OBJECT-ORIENTED, OR FUNCTIONAL WAY.

*PYTHON, A DYNAMICALLY TYPED LANGUAGE, IS ESPECIALLY FLEXIBLE, ELIMINATING HARD RULES FOR BUILDING FEATURES AND OFFERING MORE PROBLEM-SOLVING FLEXIBILITY WITH A VARIETY OF METHODS.

*IT ALSO ALLOWS USES TO COMPILE AND RUN PROGRAMS RIGHT UP TO A PROBLEMATIC AREA BECAUSE IT USES RUN TIME TYPE CHECKING RATHER THAN COMPILE TIME CHECKING.

CODES:

```python
import random

roll_again = "Y"
score=0
while roll_again =="Y":
    user = int(input("Enter your Number: "))
    print("\nRolling the dice...")



    dice=random.randint(1,6)



    print("The values are:")
    print("User =",user,"\nDice =",dice)

    if dice == user:
        print("You Win")
        score=score+1
        print("Score =",score)
    else:
        print("Keep Trying")
    roll_again = input("\nRoll the dice again? (Y/N)")
```

SCREANSHOTS/RESULT:

<u>CONCLUSION:-</u>

*I HAVE SUCCESSFULLY LEARNED ABOUT THE BASICS THAT THE BASICS THAT THE PYTHON PROGRAMMING LANGUAGE HAS TO OFFER.

*PYTHON OFFERS USEFUL FUNCTIONAL LANGUAGE.

*PYTHON IS OPEN SOURCED.

*PYTHON IS A REAL-WORLD, PRODUCTION LANGUAGE THAT IS FREELY AVAILABLE FOR MOST COMPUTERS.

*PYTHON CAN BE USED TO WRITE PURE CLIENT SLIDE CODE AS WELL AS FOR SERVER SLIDE DATA PROCESSING.

*PYTHON IS AN EASY TO USE , ROBUST PROGRAMMING LANGUAGE THAT IS FREELY AVAILABLE.