Task 3: Programming problems by implementing necessary control statements.

a) Raj and Raju are thick friends. They decide to play a game. Raju is an excellent guy with good communication skills. Raj decided to test his friend raju with few tounge twisters. Raj will utter some sentences told by his friend. The task is replace all the words that has been uttered by raj in the sentence with a special character?

Aim: To solve programming problems by implementing necessary control statements algorithm:

Step1: Start

Step2: Take integer variable x.

Step3: Divide the variable x with (x-1 to 2)

Step4: Print result.

Program

```
#include <stdio.h>
#include <string.h>
int main(){
char
```

output:

enter a sentence: veltech university is in chennai

enter a character to replace : u

modified sentence: veltech #niversity is in chennai.

```
sentence[100];
char replace_char;
printf("enter a sentence:");
fgets(sentence, 100, stdin);
printf("enter a character to replace:");
scanf("%c", &replace_char);

for(int i=0; i<strlen(sentence);
i++){if(sentence[i]==replace_char)
{
sentence[i]='#';
}
}
printf("Modified sentence; %s", sentence);
return 0;
}
```

6) write a program that generate a random number and asks the user to guess what the number is. If the user's guess is higher than the random number, If the user's guess is lower than the random number, The program should use a loop that repeats until the user correctly guesses?

Algorithm:

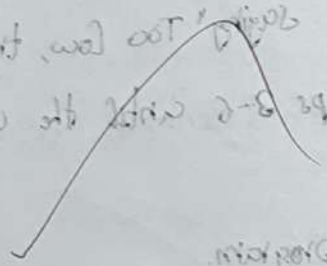
1. Generate a random number between a specified range.
2. Ask the user to enter a guess for the random number.
3. Check if the guess is equal to the random number. If it is, exit the loop and print a message
4. If the guess is higher than the random number, print a message saying "Too high, try again".
5. If the guess is lower than the random number, print a message saying "Too low, try again".
6. Repeat steps 3-6 until the user correctly guesses the number.
7. end the program.

Program

```
#include <stdio.h>
#include <stdlib.h>
#include <time.h>
int main()
{
srand(time(0));
int randomNumber = rand()%100+1;
```

Output:

Guess the number between 1 and 100: 80 Too Low, try again.
Guess the number between 1 and 100: 90 Too high, try again
Guess the number between 1 and 100: 81 Too Low, try again
Guess the number between 1 and 100: 82 Too Low, try again
Guess the number between 1 and 100: 83
Congratulations! You guessed the number 83.



```
int guess;
do {
printf("Guess the number between 1 and 100:");
scanf("%d", &guess);
if (guess > random number) {
printf("Too high, try again.\n");
}
else if (guess < random Number) {
printf("Too Low, try again.\n");
}
} while (guess != randomNumber);
printf("Congratulations! You guessed the number %d.\n",
randomNumber); return 0;
}
```

Result:- Thus, the program is written and executed successfully.

VEL TECH - CSE	
EX NO.	3
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (3)	3
RECORD (4)	
TOTAL (15)	14
SIGN WITH DATE	