**==================================**

**Q1. This is the code. And I want you guys to write the pseudocode for it**

int i;

for ( i= 0; i< 5; i++)  
 {  
   printf("The value of I is: %d", i);  
 }

**==========================================**

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1. Start
2. Input a variable i
3. Make a loop when i is less than 5 and increment for i
4. Print if the value of I is I.
5. And if i is equal to 5
6. End the loop
7. End

------------------------------------------------------------------------

**1: declare int i=0**

**2: is i<5? yes then goto step 3 no then go to step 5**

**3: printf("The value of I is: %d", i);**

**4:i=i+1 and then go to step 2,**

**5:end**

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1: i=0 i<5 yes ,

2: The value of I is: 0

3:i=1

4:loop-2

5:i=1i<5 yes ,

6:The value of I is 1

7:i=2

8:loop 3

9:i=2 i<5 yes ,

The value of I is 2

i=3

loop 4

i=3 i<5 yes,

The value of I is 3

i=4

loop 5

i=4 i<5 yes ,

The value of I is 4

i=5

loop 6 i<5 no then stops.

**------------------------------------------------------------------------------------------------------**

**Bukhari**

Begin

// We are going to count from 0 to 4. Each time we count, we print a message.

1. Start counting with i = 0.

2. If i is less than 5, then do the following steps:

    a. Show a message that says "The value of I is: " and then show the number we are currently at (i).

    b. After showing the message, add 1 to i (this is like moving to the next number).

3. Repeat step 2 until i is not less than 5 anymore.

// Once i is 5, we have shown all our messages and we stop.

End

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1. Start
2. i = 0

 and i < 5?

1. yes, “the value of I is …” and +1 in the value of i
2. no, end

3. End

—------------------------------------------------------------------------------------------------------------------------

**=========================================**  
**Q2. What will be the output of the code below**

A screenshot of a computer

Description automatically generated

**===================================================**

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coffee #0

coffee #1

coffee #2  
coffee #3

I think i shout... Maybe

coffee #4

Thats it I.m done.

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Coffee #0

Coffee #1

coffee #2

Coffee #3

I think…

Coffee #4

Thats it!!

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Output: #0, #1,#2,#3, should stop, #4, that’s it

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**============================================================**

**Q3. Guess the number code:**

**Write a program in which a coder randomly selects a number and the user has to guess it. After each guess, the program should tell the player if the guess is too high, too low, or correct. Print the number of attempts they used.**

**int randomNumber = 46;**

**========================================================**  
  
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int randomNumber=46, guess, attempts;

do{

printf("Guess the random number");

scanf("%d",&guess);

if (guess<randomNumber){

printf("You've got a low number");

}

elseif(guess>randomNumber){printf("You've got a higher number");

}

attempts++

} while (guess !=randomNumber);

printf("You guessed in %d attempts", attempts);

—-------------------------------------------------------------------------------

int ranNum;

int countNum = 0;

int realNum = 46;

do {

printf("guess the number!\n > ");

scanf("%d",&ranNum);

if (ranNum > realNum){

    printf("number too high!\n");

}

else if (ranNum < realNum){

    printf("number too low!\n");

}

countNum++;

} while (ranNum != realNum);

printf("Wow you got the number! %d you got it in %d guesses!\n", realNum, countNum);

—--------------------------------------------------------------------

#define \_CRT\_SECURE\_NO\_WARNINGS

 #include <stdio.h>

 int main(){

 int randomNumber=46, flag=0,guessedNumber;

 do{

 printf("Guess the number: ");

 scanf("%d",&guessedNumber);

 if(guessedNumber>randomNumber){

 printf("The number you entered is too high!");

 }

 else if(guessedNumber<randomNumber){

 printf("The number you have guessed is too low!");

 }

 else{

 printf("COngratulations! You have guessed the correct number!");

 flag=1;

 }

 }while(flag!=1)

 return 0;

 }

—----------------------------------------------------------------------------------

int randomNumber = 46;

Int guess, i;

Do {

   printf("Guess the number in my mind: ");

   scanf("%d", &guess);

   for(I = 0, guess < 46 && flag == 1 ,I++)

   printf("Your guess is too low");

      If (guess > 46)

         For (I = 0, guess > 46 && flag == 1, I++)

         printf("Your guess is too high");

      Else flag = 0

}

While ()

Printf("You guessed right! The number is %d", randomNumber)

—------------------------------------------------------------------------------------

int main ()

{

int randomNumber = 46, guess, flag=1, attempt;

for (guess; guess != randomNumber && flag;attempt++)

{

printf("Guess a number: ");

scanf ("%d", &guess);

if (guess > randomNumber)

{attempt +=1;

printf("too high");

}

else if (guess < randomNumber)

{attempt +=1;

printf ("too low");

}

else

{

printf ("You try %d times", attempt);

}

}

return 0;

}

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Q4. What is the difference between i++ and ++i

int i = 5;

int a = 0;

int a = i++;