QUESTION:

Design of 4 stage pipeline for multiplication and division of two numbers using any high level language.

PROGRAM:

#include<stdio.h>

int main()

{

int counter =1,a,b,choice,res,ins;

printf("Enter number 1:");

scanf("%d",&a);

counter = counter+1;

printf("Enter number 2:");

scanf("%d",&b);

counter = counter +1;

printf("1-Addition:\n2-Subtraction:\n3-Multiplication:\n4-Division:");

scanf("%d",&choice);

switch(choice)

{

case 1: printf("Performing addition\n");

res = a+b;

counter = counter+1;

break;

case 2: printf("Performing subtraction\n");

res = a-b;

counter = counter+1;

break;

case 3: printf("Performing Multiplication\n");

res = a\*b;

counter = counter+1;

break;

case 4: printf("Performing Division\n");

res = a/b;

counter = counter+1;

break;

default: printf("Wrong input");

break;

}

printf("The cycle value is:%d\n",counter);

printf("Enter the number of instructions:");

scanf("%d",&ins);

int performance\_measure = ins/counter;

printf("The performance measure is:%d\n",performance\_measure);

return 0;

}

OUTPUT:

