4 STAGE PIPELINING

PROGRAM:

|  |
| --- |
| #include<stdio.h> |
|  | void main(){ |
|  | int counter=0; |
|  | int input; |
|  | int num1,num2; |
|  | int op; |
|  | int res; |
|  | int ins; |
|  | int performance\_measure=0; |
|  | printf("\n Enter 1st value: "); |
|  | scanf("%d",&num1); |
|  | counter+=1; |
|  | printf("\n Enter the 2nd value: "); |
|  | scanf("%d",&num2); |
|  | counter+=1; |
|  | printf("\n Enter the option: \n1)Addition\n2)Subraction\n3)Multiplication\n4)Division"); |
|  | scanf("%d",&op); |
|  | switch(op){ |
|  | case 1: |
|  | printf("Performing addition operation"); |
|  | res=num1+num2; |
|  | counter+=1; |
|  | break; |
|  | case 2: |
|  | printf("Performing subraction operation"); |
|  | res=num1-num2; |
|  | counter+=1; |
|  | break; |
|  | case 3: |
|  | printf("Performing multiplication operation"); |
|  | res=num1\*num2; |
|  | counter+=1; |
|  | break; |
|  | case 4: |
|  | if(num2==0){ |
|  | printf("\n Denominator can't be zero"); |
|  | } |
|  | else{ |
|  | printf("Performing division operation"); |
|  | res=num1/num2; |
|  | counter+=1; |
|  | break; |
|  | } |
|  | default: |
|  | printf("Invalid case..."); |
|  | counter+=3; |
|  | break; |
|  | } |
|  | printf("\n CYCLE VALUE IS : %d",counter); |
|  | printf("Enter the no.instruction"); |
|  | scanf("%d",&ins); |
|  | performance\_measure=ins/counter; |
|  | printf("\n Performance Measure is: %d",performance\_measure); |
|  | } |

OUTPUT:

Enter 1st value: 3

Enter the 2nd value: 2

Enter the option:

1)Addition

2)Subraction

3)Multiplication

4)Division2

Performing subraction operation

CYCLE VALUE IS : 3Enter the no.instruction5

Performance Measure is: 1

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Process exited after 9.339 seconds with return value 27

Press any key to continue . . .