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**Program 2**

**Question:**

Write a program using structure to read, display, sum and difference of two complex numbers.

**Code:**

#include<stdio.h>

#include<stdlib.h>

typedef struct

{

int realnum1;

int imgnum1;

int realnum2;

int imgnum2;

int realsum,imgsum;

int realdifference,imgdifference;

}numbers;

int main()

{

numbers n;

printf("Enter the real and imaginary part of Number1\n");

scanf("%d",&n.realnum1);

scanf("%d",&n.imgnum1);

printf("Enter the real and imaginary part of Number2\n");

scanf("%d",&n.realnum2);

scanf("%d",&n.imgnum2);

/\*Inputs Taken\*/

n.realsum=n.realnum1+n.realnum2;

n.imgsum=n.imgnum1+n.imgnum2;

if(n.realnum1>=n.realnum2)

{

n.realdifference=n.realnum1-n.realnum2;

n.imgdifference=n.imgnum1-n.imgnum2;

}

else

{

n.realdifference=n.realnum2-n.realnum1;

n.imgdifference=n.imgnum2-n.imgnum1;

}

/\*Operations Done\*/

printf("\n\nOutputs:\n");

printf("Sum: %d+%di\n",n.realsum,n.imgsum);

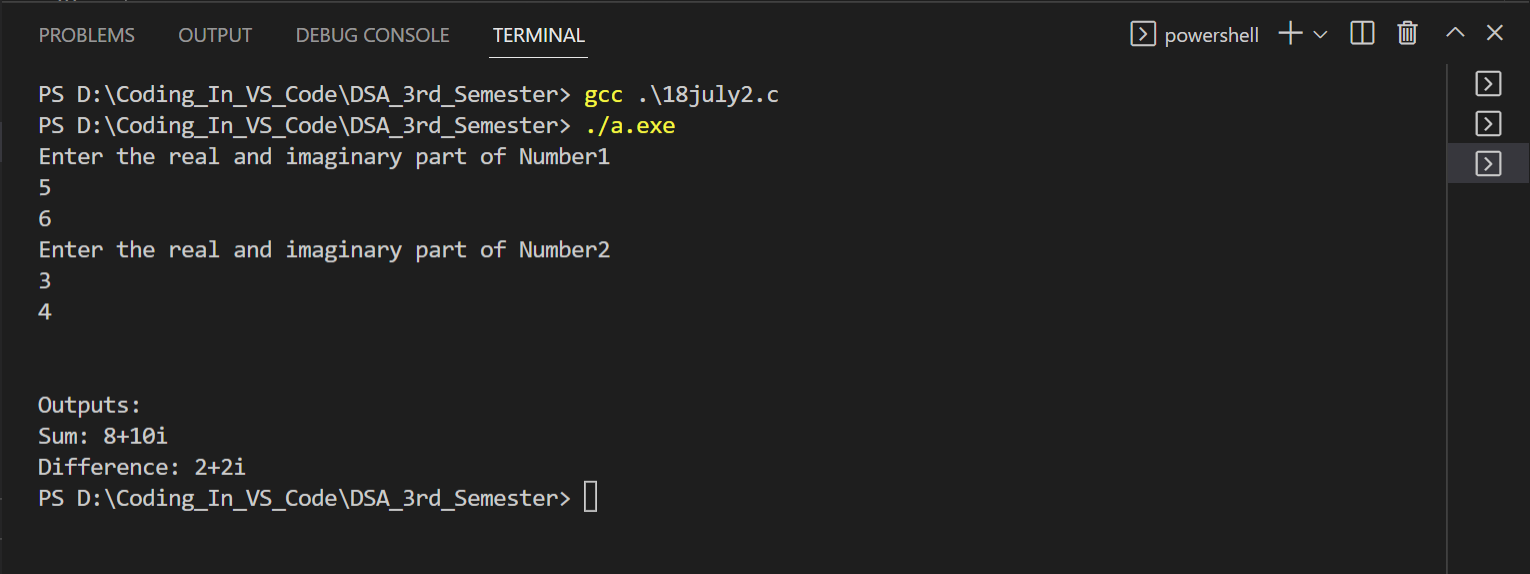
printf("Difference: %d+%di\n",n.realdifference,n.imgdifference);

/\*Outputs shown\*/

return 0;

}

**Output:**

****