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BASIC C PROGRAMMING-PRACTICE

PROGRAM 1:

Question 1 | Correct Mark 1.00 out of 1.00 Flag question

Given two numbers, write a C program to swap the given numbers.

For example:

Input	Result
10 20	20 10

Answer: (penalty regime: 0 %)

```c
#include<stdio.h>
int main()
{
    int a,b,c;
    scanf("%d %d",&a,&b);
    c=a;
    a=b;
    b=c;
    printf("%d %d",a,b);
}
```

	Input	Expected	Got	
✔	10 20	20 10	20 10	✔

Passed all tests! ✔

PROGRAM 2:

1

Answer: (penalty regime: 0 %)

```c
#include<stdio.h>
int main()
{
    int a,b,c,t;
    scanf("%d %d %d",&a,&b,&c);
    t=a+b+c;
    if((a>=65&&b>=55&&c>=50)||(t>=180))
    {
        printf("The candidate is eligible");
    }
    else
    {
        printf("The candidate is not eligible");
    }
}
```

	Input	Expected	Got	
✔	70 60 80	The candidate is eligible	The candidate is eligible	✔
✔	50 80 80	The candidate is eligible	The candidate is eligible	✔

Passed all tests! ✔

PROGRAM 3:

Question 3

Malini goes to BestSave hyper market to buy grocery items. BestSave hyper market provides 10% discount on the bill amount B when ever the bill amount B is more than Rs.2000.

The bill amount B is passed as the input to the program. The program must print the final amount A payable by Malini.

Input Format:

The first line denotes the value of B.

Output Format:

The first line contains the value of the final payable amount A.

Answer: (penalty regime: 0 %)

```c
#include<stdio.h>
int main()
{
    int a,r;
    scanf("%d",&a);
    if(a<=2000)
    {
        r=a;
    }
    if(a>2000)
    {
        r=a-(a*0.1);
    }
    printf("%d",r);
}
```

	Input	Expected	Got	
✔	1900	1900	1900	✔
✔	3000	2700	2700	✔

Passed all tests! ✔

Correct

PROGRAM 4: 1

Answer: (penalty regime: 0 %)

```c
#include<stdio.h>
int main()
{
    int b,p,r;
    scanf("%d %d",&b,&p);
    r=b*(2*p);
    printf("%d",r);
}
```

	Input	Expected	Got	
✔	100 2	400	400	✔

Passed all tests! ✔

PROGRAM 5: 1

```c
#include<stdio.h>
int main()
{
    int a,b,r=0;
    scanf("%d %d",&a,&b);
    for(int i=0;i<b;i++)
    {
        r+=a+(200*i);
    }
    printf("%d",r);
}
```

	Input	Expected	Got	
✔	500 3	2100	2100	✔
✔	100 3	900	900	✔

Passed all tests! ✔

PROGRAM 6:

Question 6

Two numbers M and N are passed as the input. A number X is also passed as the input. The program must print the numbers divisible by X from N to M (inclusive of M and N).

Input Format:

The first line denotes the value of M
The second line denotes the value of N
The third line denotes the value of X

Output Format:

Numbers divisible by X from N to M, with each number separated by a space.

Boundary Conditions:

1 <= M <= 9999999
M < N <= 9999999
1 <= X <= 9999

Answer: (penalty regime: 0 %)

```c
#include<stdio.h>
int main()
{
    int m,n,x;
    scanf("%d %d %d",&m,&n,&x);
    for(int i=n;i>=m;i--)
    {
        if(i%x==0)
        {
            printf("%d ",i);
        }
    }
}
```

	Input	Expected	Got	
✔	2 40 7	35 28 21 14 7	35 28 21 14 7	✔

Passed all tests! ✔

PROGRAM 7:

Write a C program to find the quotient and reminder of given integers.

For example:

Input	Result
12 3	4 0

Answer: (penalty regime: 0 %)

```c
#include<stdio.h>
int main()
{
    int a,b,q,r;
    scanf("%d %d",&a,&b);
    q=a/b;
    r=a%b;
    printf("%d\n%d",q,r);
}
```

	Input	Expected	Got	
✔	12 3	4 0	4 0	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

PROGRAM 8:

Write a C program to find the biggest among the given 3 integers?

For example:

Input	Result
10 20 30	30

Answer: (penalty regime: 0 %)

```c
#include<stdio.h>
int main()
{
    int a,b,c,r;
    scanf("%d %d %d",&a,&b,&c);
    if(a>b&&a>c)
    {
        r=a;
    }
    else if(b>a&&b>c)
    {
        r=b;
    }
    else
    {
        r=c;
    }
    printf("%d",r);
}
```

	Input	Expected	Got	
✔	10 20 30	30	30	✔

Passed all tests! ✔

PROGRAM 9: 1

	Input	Expected	Got	
✔	12	Even	Even	✔
✔	11	Odd	Odd	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

PROGRAM 10: 1

	Input	Expected	Got	
✔	5	120	120	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

PROGRAM 11:

Write a C program to find the sum first N natural numbers.

For example:

Input	Result
3	6

Answer: (penalty regime: 0 %)

```c
#include<stdio.h>
int main()
{
    int a,sum=0;
    scanf("%d",&a);
    for(int i=1;i<=a;i++)
    {
        sum+=i;
    }
    printf("%d",sum);
}
```

	Input	Expected	Got	
✔	3	6	6	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

PROGRAM 12: 1

Answer: (penalty regime: 0 %)

```c
#include<stdio.h>
int main()
{
    int n;
    scanf("%d",&n);
    int a=0,b=1,c;
    for(int i=2;i<=n;i++)
    {
        c=a+b;
        a=b;
        b=c;
    }
    if(n==0)
    {
        c=a;
    }
    if(n==1)
    {
        c=b;
    }
    printf("%d",c);
}
```

	Input	Expected	Got	
✔	0	0	0	✔
✔	1	1	1	✔
✔	4	3	3	✔

Passed all tests! ✔

PROGRAM 13: 1

	Input	Expected	Got	
✔	2 5	32	32	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

PROGRAM 14:

Question 14 | Correct Mark 1.00 out of 1.00 Flag question

Write a C program to find Whether the given integer is prime or not.

For example:

Input	Result
7	Prime
9	No Prime

Answer: (penalty regime: 0 %)

```c
#include<stdio.h>
int prime(int n,int d)
{
    if(n<=1)
    {
        return 0;
    }
    if(d==1)
    {
        return 1;
    }
    if(n%d==0)
    {
        return 0;
    }
    return prime(n,d-1);
}
int main()
{
    int n;
    scanf("%d",&n);
    if(prime(n,n/2))
    {
        printf("Prime");
    }
    else
    {
        printf("No Prime");
    }
}
```

	Input	Expected	Got	
✔	7	Prime	Prime	✔
✔	9	No Prime	No Prime	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

PROGRAM 15:

Question 15 | Correct Mark 1.00 out of 1.00 Flag question

Write a C program to find the reverse of the given integer?

Answer: (penalty regime: 0 %)

```c
#include<stdio.h>
int main()
{
    int a;
    scanf("%d",&a);
    int digit,rev=0;
    while(a!=0)
    {
        digit=a%10;
        rev=(rev*10)+digit;
        a/=10;
    }
    printf("%d",rev);
}
```

	Input	Expected	Got	
✔	123	321	321	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.