# C PROGRAMMING ASSIGNMENT: 6

DATE: 11.11.21

SUBMITTED BY: -

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BRANCH: CSE

SECTION: B22

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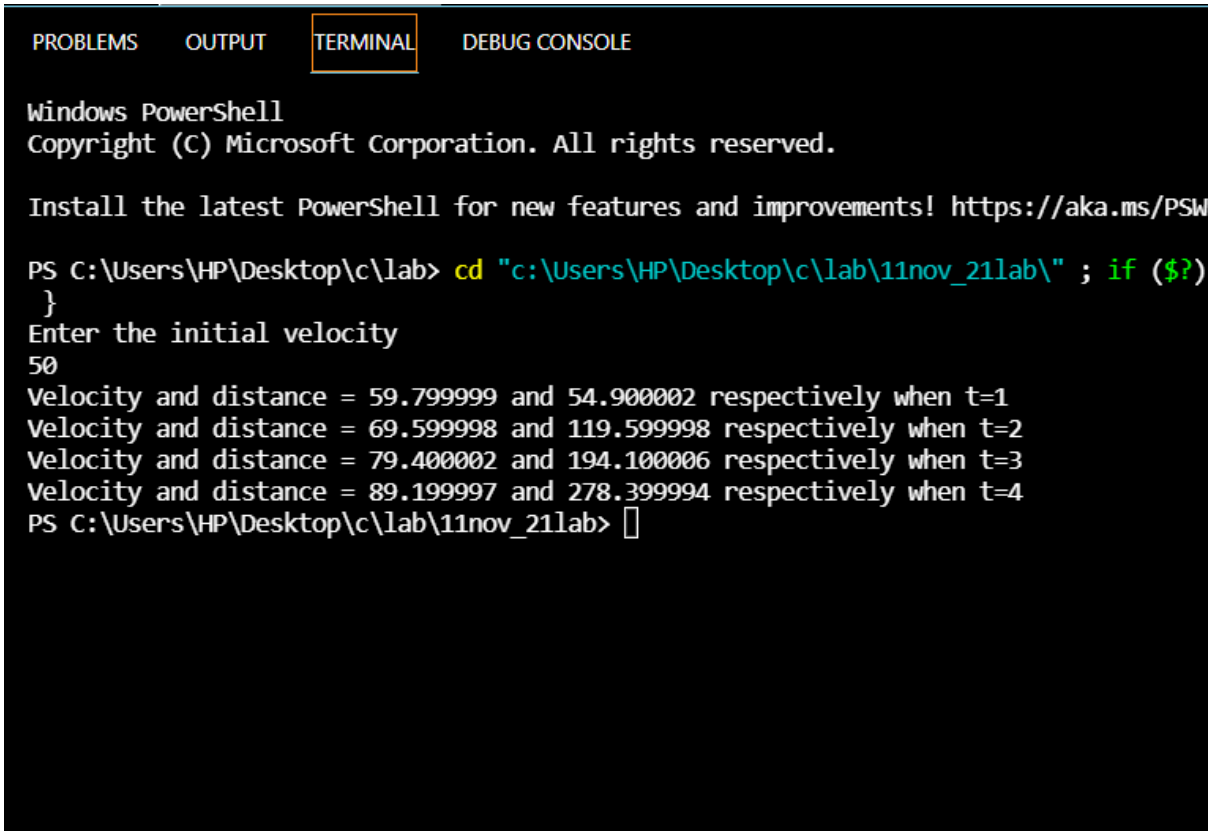
**Program 1:** write a program to find out the velocity and distance covered by a stone after time(1,2,3,4,5 sec), if it is thrown with a initial velocity from top of eiffel tower

**Code:**

```
#include<stdio.h>
#define g 9.8
#define h 0.5
int main(int argc, char const *argv[])
{
    int u,t=0; float v,s;
    printf("Enter the initial velocity\n");
    scanf("%d",&u);
    //t=1
    t++;
    v=u+g*t;
    s=u*t+h*g*t*t;
    printf("Velocity and distance = %f and %f respectively when t=1\n",v,s);
     //t=2
    t++;
    v=u+g*t;
    s=u*t+h*g*t*t;
    printf("Velocity and distance = %f and %f respectively when t=2\n",v,s);
     //t=3
    t++;
    v=u+g*t;
    s=u*t+h*g*t*t;
    printf("Velocity and distance = %f and %f respectively when t=3\n",v,s);
     //t=4
    t++;
    v=u+g*t;
```

```
    s=u*t+h*g*t*t;
    printf("Velocity and distance = %f and %f respectively when t=4\n",v,s);
    return 0;
     //t=5
    t++;
    v=u+g*t;
    s=u*t+h*g*t*t;
    printf("Velocity and distance = %f and %f respectively when t=5\n",v,s);
}
```

## Output:

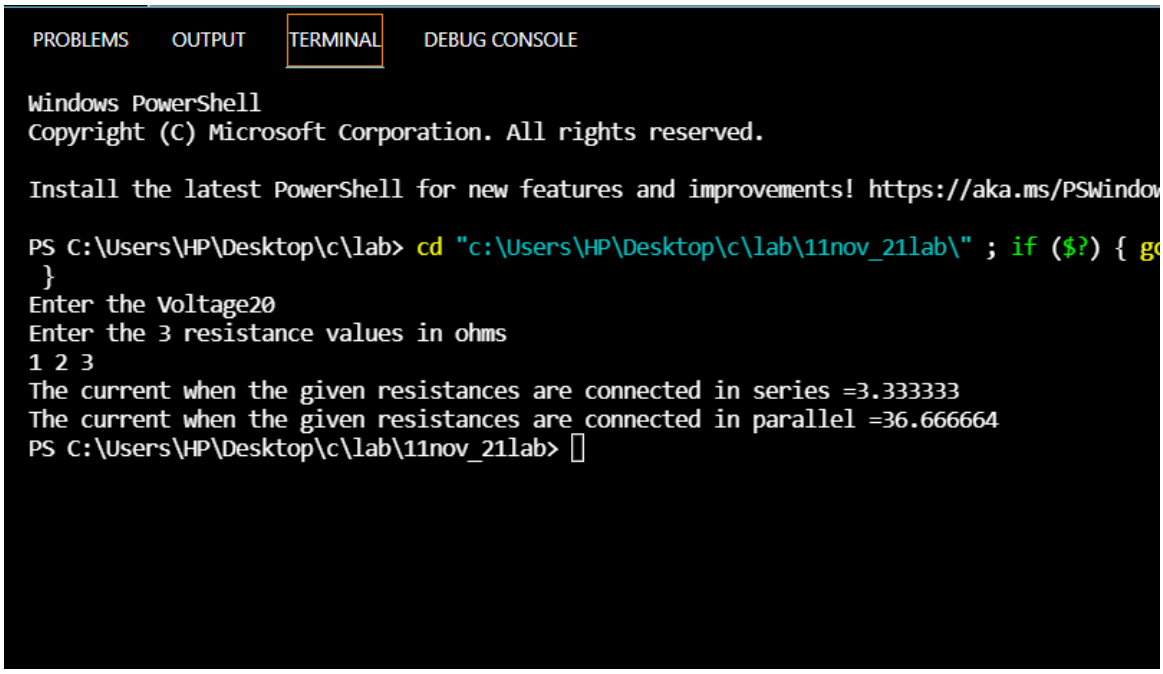


**Program 2:** Write a program to accept resistance in series and parallel and find the current

# Code:

```
#include<stdio.h>
int main(int argc, char const *argv[])
{
    float r1,r2,r3,v,i1,i2,t,rs,rp;
    printf("Enter the Voltage");
    scanf("%f",&v);
    printf("Enter the 3 resistance values in ohms\n");
    scanf("%f %f %f",&r1,&r2,&r3);
    rs=r1+r2+r3;
    i1=v/rs;
    printf("The current when the given resistances are connected in series
=%f\n",i1);
    rp=(1/r1)+(1/r2)+(1/r3);
    t=1/rp;
    i2=v/t;
    printf("The current when the given resistances are connected in parallel
=%f\n",i2);
       return 0;
}
```

# Output:-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OUTPUT
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DEBUG CONSOLE
Windows PowerShell
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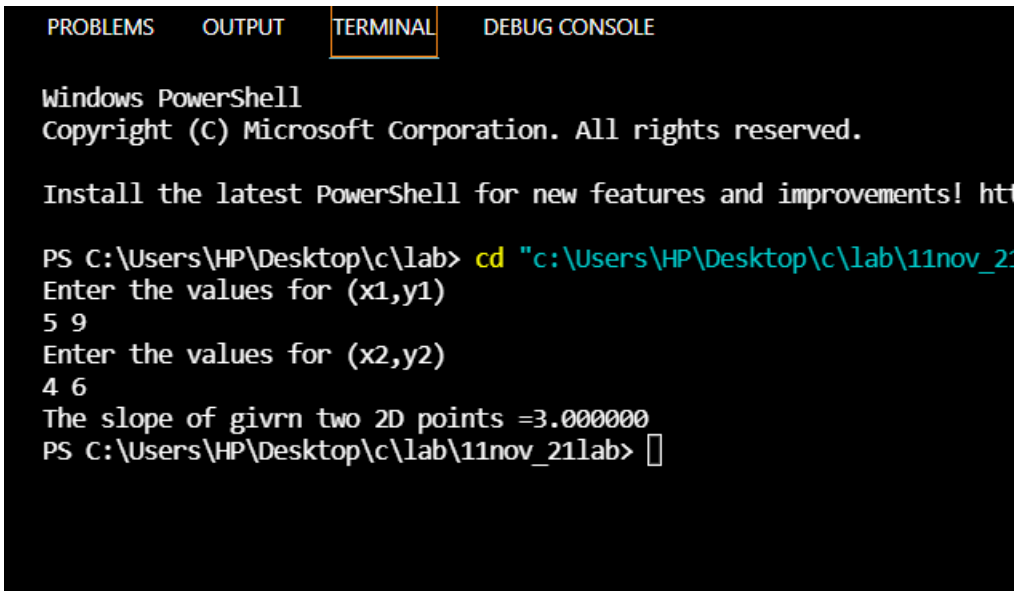
PS C:\Users\HP\Desktop\c\lab> cd "c:\Users\HP\Desktop\c\lab\11nov_21lab\" ; if ($?) { g
}
Enter the Voltage20
Enter the 3 resistance values in ohms
1 2 3
The current when the given resistances are connected in series =3.333333
The current when the given resistances are connected in parallel =36.666664
PS C:\Users\HP\Desktop\c\lab\11nov_21lab>

**Program 3:** Write a program to find 2D slope

**Code:**

```c
#include<stdio.h>
int main(int argc, char const *argv[])
{
    int x1,x2,y1,y2;float m;
    printf("Enter the values for (x1,y1)\n");
    scanf("%d %d",&x1,&y1);
    printf("Enter the values for (x2,y2)\n");
    scanf("%d %d",&x2,&y2);
    m=(y2-y1)/(x2-x1);
    printf("The slope of givrn two 2D points =%f",m);
    return 0;
}
```

**Output:**

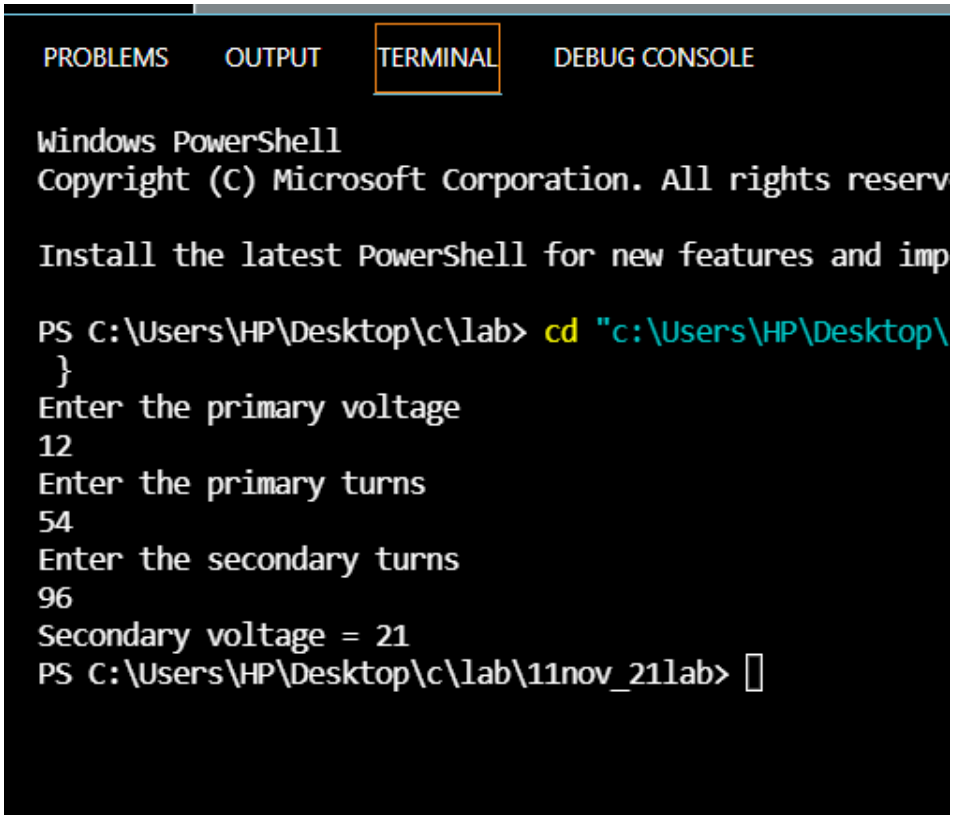


**Program 4:** write a program to find out the secondary voltage of a transformer if primary voltage, turns of primary and secondary are given.

**Code:**

```c
#include<stdio.h>
int main(int argc, char const *argv[])
{
    int pt,st,pv,sv;
    printf("Enter the primary voltage\n");
    scanf("%d",&pv);
    printf("Enter the primary turns\n");
    scanf("%d",&pt);
    printf("Enter the secondary turns\n");
    scanf("%d",&st);
    sv=(pv*st)/pt;
    printf("Secondary voltage = %d",sv);
    return 0;
}
```

**Output:**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PS C:\Users\HP\Desktop\c\lab> cd "c:\Users\HP\Desktop\
}
Enter the primary voltage
12
Enter the primary turns
54
Enter the secondary turns
96
Secondary voltage = 21
PS C:\Users\HP\Desktop\c\lab\11nov_21lab>