



PROGRAMMING LAB **ASSIGNMENT - 9**

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Q1) Write a program using a function which takes variable number of arguments (like printf(), scanf(), etc). You may design any function by your own, such as searching a key from a set of values, where the search key and the set of values are passed as arguments.

```
#include <stdio.h>

#include <stdarg.h>

void avrg(int num, ...)
{
    va_list ap;

    va_start(ap, num);

    int sum= 0;

    for(int i= 1; i<=num; i++)
        sum+= va_arg(ap, int);

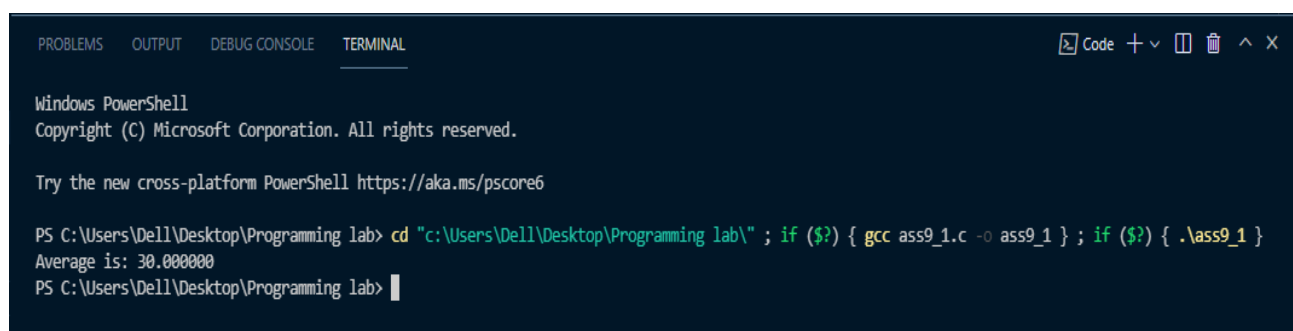
    float av= sum*1.0f/num;

    printf("Average is: %f", av);

    va_end(ap);
}

void main()
{
    avrg(5, 10, 20, 30, 40, 50);
}
```

OUTPUT:



```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL

Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Users\Dell\Desktop\Programming lab> cd "c:\Users\Dell\Desktop\Programming lab\" ; if ($?) { gcc ass9_1.c -o ass9_1 } ; if ($?) { .\ass9_1 }
Average is: 30.000000
PS C:\Users\Dell\Desktop\Programming lab> █
```

Q2) Write a program like "Is" in Unix/Linux which takes input from command line.

```
#include <stdio.h>

#include <stdlib.h>

void main(int argc, char** argv)
{
    int num= atoi(argv[1]);

    int c=0;

    for(int i= 2; i<num; i++)

        if(num%i==0)

            c++;

    if(c)

        printf("Argument is not prime ");

    else

        printf("Argument is prime ");

}
```

OUTPUT:

```
PS C:\Users\Dell\Desktop\Programming lab> wsl
darkdevil@DESKTOP-IN4MDM4:/mnt/c/Users/Dell/Desktop/Programming lab$ gcc ass9_2.c
darkdevil@DESKTOP-IN4MDM4:/mnt/c/Users/Dell/Desktop/Programming lab$ ./a.out 14
Argument is not prime darkdevil@DESKTOP-IN4MDM4:/mnt/c/Users/Dell/Desktop/Programming lab$
```

```
PS C:\Users\Dell\Desktop\Programming lab> wsl
darkdevil@DESKTOP-IN4MDM4:/mnt/c/Users/Dell/Desktop/Programming lab$ gcc ass9_2.c
darkdevil@DESKTOP-IN4MDM4:/mnt/c/Users/Dell/Desktop/Programming lab$ ./a.out 41
Argument is prime darkdevil@DESKTOP-IN4MDM4:/mnt/c/Users/Dell/Desktop/Programming lab$
```