

Date

128 April - 2022

Anmol Mishra  
21EC30060DATE: \_\_\_/\_\_\_/\_\_\_  
PAGE \_\_\_

PDS Lab

Assignment - 2

Name - Anmol Kumar Mishra

Class - Section-B

Roll no. - 21EC30060

Email → anmolmishra171@gmail.com

Please accept this assignment in pen  
 and paper mode because my laptop  
 is not working and I have  
 taken permission from

Prof. Bivas Mitra and T.A. Salma Mandi

Q.2a)Sol

```
#include <stdio.h>
#include <math.h>
int main()
{
    float z, s;
    int k;
    printf ("Enter the value for z : ");
    // Enter the value of z
    scanf ("%f", &z);
    // It use to take input from user
    printf ("Enter the value for k : ");
    scanf ("%d", &k);
    // It use to take input from user
```

```
for (int i=1; i<=k; i=i+1)
```

{

$$s = \sqrt{z}; \quad // \quad s = \sqrt{z}$$

$$z = z - s;$$

if ( $z < 0$ )

{  
     $z = 0 - z;$   
    pointf ("%.0f, %.d") \n"; z, i);  
    if ( $z == 0$ )  
        { break; }  
}

~~Pointf~~

if ( $z - 0.25000 \geq 0$ )

{  
     $i = i + 1;$   
    if ( $i > 50$ )  
        { break; }  
}

Pointf ("%.0f, %.d") \n"; z, i);

$i = i + 1;$

if ( $i > 50$ )

{ break; }

$s = s - (1.0 / i);$

$z = z - (s * s);$

Pointf ("%.0f, %.d") \n"; z, i);

} // end while loop for printing

return 0;

}

(P-7.0)

Q2b)2bScd

```
#include <stdio.h>
#include <time.h>
#include <stdlib.h>
#include <math.h>
```

```
{ int main()
```

```
    srand (time (NULL));
    int distance, d_Square = 0, n, k, p;
    float exp_d;
    printf ("Enter the no. of steps (n): ");
    scanf ("%d", &n);
    printf ("Enter the value of k: ");
    scanf ("%d", &k);
    for (int i=1; i<=k; i=i+1)
```

```
{     distance = 0;
        for (int j=1; j<=n; j=j+1)
```

```
        p = rand () & 1 ? -1 : 1;
        distance = distance + p;
```

```
}
```

```
    d_Square = d_Square + (distance * distance);
```

```
}
```

```
exp_d = sqrt ((d_Square * 1.0) / k);
```

```
printf ("Expected distance is %f \n", exp_d);
```

```
return 0;
```