

PROGRAMS

3] PROGRAM -- 3

#include <stdio.h>

int main() {

int rows, i, j, number = 4;

printf ("Enter the number of rows: ");

scanf ("%d", &rows);

for (i = 4; i <= rows; i++) {

for (j = 4; j <= 4; j++) {

printf ("%d", number);

++ number;

}

printf ("\n");

}

return 0;

}

4] PROGRAM -- 4

#include <stdio.h>

int main()

{

int CIE, SEE;

float tot;

printf ("Enter the CIE (50) and SEE (100) marks of the student respectively \n");

scanf ("%d %d", &CIE, &SEE);

tot = (SEE/2.0) + CIE;

if (CIE >= 20 & SEE >= 40)

```

{
    if (tot > 89 && tot <= 100)
        printf ("Grade : S");
    else if (tot > 79 && tot <= 89)
        printf ("Grade : A");
    else if (tot > 69 && tot <= 79)
        printf ("Grade : B");
    else if (tot > 59 && tot <= 69)
        printf ("Grade : C");
    else if (tot > 49 && tot <= 59)
        printf ("Grade : D");
    else
        printf ("Grade : E");
}

else if (CIE >= 20 && SEE < 40)
    printf ("Grade : F");
else
    printf ("Not eligible, grade not applicable");
}

```

5) PROGRAM--5

```
#include <stdio.h>
```

```
int main()
```

```
{
```

```
    int low, high, n;
```

```
    int count;
```

```
    int div;
```

```
    printf ("Enter the start number of the range: \n");
```

```
    scanf ("%d", &low);
```

```
    printf ("Enter the end number of the range: \n");
```

```

5) scanf ("%d", &high);
   printf ("The prime numbers between the given range
           are : \n");

```

```

for (n = low; n <= high; n++)
{

```

```

    int count = 0;

```

```

    for (div = 2; div * div <= n; div++)
    {

```

```

        if (n % div == 0)

```

```

            count++;

```

```

            break;

```

```

        }

```

```

    }

```

```

    if (count == 0)
    {

```

```


```

```

        printf ("%d is not a prime number\n", n);

```

```

    }

```

```

}

```

6) PROGRAM -- 6

```

#include <stdio.h>

```

```

#include <math.h>

```

```

#include <stdlib.h>

```

```

int main () {

```

```

    int c = 4;

```

```

    float a, v, r, h;

```

```

    while (c)

```

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{

```
printf ("Enter the choice of shape: \n");
printf ("1. Cylinder \n 2. Cone \n 3. Sphere \n 0. Exit \n");
scanf ("%d", &c);
switch(c)
```

{

```
case 1: printf ("Enter radius: \n");
scanf ("%f", &r);
printf ("Enter height: \n");
scanf ("%f", &h);
a = (2 * 3.14 * r * h) + (2 * 3.14 * r * r);
v = (3.14 * r * h);
printf ("Area: %f \n Volume: %f \n", a, v);
break;
```

```
case 2: printf ("Enter radius: \n");
scanf ("%f", &r);
printf ("Enter height: \n");
scanf ("%f", &h);
a = (3.14 * r) * (r + sqrt((h * h) + (r * r)));
v = (3.14 * r * h) / 3.0;
printf ("Area: %f \n Volume: %f \n", a, v);
break;
```

```
case 3: printf ("Enter radius: \n");
scanf ("%f", &r);
a = 4 * 3.14 * r * r;
v = (4 * 3.14 * r * r * r) / 3.0;
printf ("Area: %f \n Volume: %f \n", a, v);
break;
```

```
case 0: printf ("Exit \n");
exit(0);
```

```
default: printf ("Invalid choice \n");
```

}

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return 0;

g