

Week 2 programs:

Q1. #include <stdio.h>

int main () {

int rows, i, j, number = 1;

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

scanf("%d", &rows);

for (i = 1; i <= rows; i++) {

for (j = 1; j <= i; ++j) {

printf("%d", number);

++number;

}

printf("\n");

}

return 0;

Q3. #include <stdio.h>

int main () {

int low, high, i, flag;

printf("Enter two numbers:");

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

printf("Prime numbers between %d and %d are:", low, high);

while (low < high) {

flag = 0;

if (low <= 1) {

++low;

continue;

}

for (i = 2; i <= low / 2; ++i) {

if (low % i == 0) {

flag = 1;

```
break;
```

```
}
```

```
}
```

```
if (flag == 0)
```

```
printf("%d", low);
```

```
++ low;
```

```
}
```

```
return 0;
```

```
}
```

q6. #include <stdio.h>

```
#define Pi (22/7)
```

```
void main()
```

```
{
```

```
float radius, height, area, volume;
```

```
int number, choice;
```

```
printf("Enter\n");
```

```
printf("1. cylinder\n");
```

```
printf("2. Cone\n");
```

```
printf("3. Sphere\n");
```

```
scanf("%f%f", &radius, &height);
```

```
area = 2 * (22/7) * radius * (radius + height);
```

```
volume = (22/7) * radius * radius * height;
```

```
printf("area of cylinder is %.3f", area);
```

```
printf("\n Volume of cylinder is %.3f", volume);
```

```
break;
```

Case 2:-

```

printf ("Enter value
printf (" " )
scanf ( " " )
area = . . . . .
volume = . . . . .
printf ( " " )
printf ( " " )

```



for (sphere) it  
 : (vol & cone) : thing  
 : (val) : thing

```

while (number != 0);
}

```

Great radius, height, area, volume;  
 int number, choice;  
 printf ("Enter n");  
 scanf ("%d", &n);  
 printf ("1. cylinder\n");  
 printf ("2. cone\n");  
 printf ("3. sphere\n");  
 printf ("4. exit\n");  
 choice = 0;  
 while (choice != 4) {  
 printf ("Enter choice: ");  
 scanf ("%d", &choice);  
 switch (choice) {  
 case 1: {  
 printf ("Enter radius: ");  
 scanf ("%d", &r);  
 printf ("Enter height: ");  
 scanf ("%d", &h);  
 area = 2 \* 3.14 \* r \* h;  
 volume = 3.14 \* r \* r \* h / 2;  
 printf ("Area: %d\n", area);  
 printf ("Volume: %d\n", volume);  
 break;
 }  
 case 2: {  
 printf ("Enter radius: ");  
 scanf ("%d", &r);  
 printf ("Enter height: ");  
 scanf ("%d", &h);  
 area = 3.14 \* r \* r \* h;  
 volume = 3.14 \* r \* r \* h / 3;  
 printf ("Area: %d\n", area);  
 printf ("Volume: %d\n", volume);  
 break;
 }  
 case 3: {  
 printf ("Enter radius: ");  
 scanf ("%d", &r);  
 printf ("Enter height: ");  
 scanf ("%d", &h);  
 area = 4 \* 3.14 \* r \* r;  
 volume = 4 \* 3.14 \* r \* r \* h / 3;  
 printf ("Area: %d\n", area);  
 printf ("Volume: %d\n", volume);  
 break;
 }  
 case 4: {  
 break;
 }  
 }  
 }