3)
```
#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;
}
```

4)
```
#include <stdio.h>
int main()
{
  int cie, see;
  float total;
  printf("Enter student marks:");
  scanf("%d%d", &cie, &see);
  total = (cie) + see/2;
  printf("total = %.2f\n", total);
  if (total >= 90)
  {
    printf("Grade S");
  }
  else if (total >= 80)
  {
    printf("Grade A");
```

```
else if (total >= 70)
{
  printf("Grade B");
}
else if (total >= 60)
{
  printf("Grade C");
}
else if (total >= 50)
{
  printf("Grade D");
}
else if (total >= 40)
{
  printf("Grade E");
}
else
{
  printf("Grade F");
}
return 0;
}
```

3)

```
#include <stdio.h>
void main()
{
  int n1, n2;
  printf("Enter the first number");
  scanf("%d", &n1);
  printf("Enter the second number");
  scanf("%d", &n2);
  printf("The prime numbers are:");
  for(i=n1; i<=n2; i++)
  {
```

```
int c=0;
for(int j=1; j<=i; j++)
{
  if(i%j==0)
  {
    c++;
  }
}
if(c==2)
printf("%d", i);
}
}
```

a) ~~XXXXXXXXXX~~

b)
```
#include<stdio.h>
#include<math.h>
#define PI 3.14
int main()
{
  float ~~radius/height~~ radius, hight
  float surface_area, volume;
  int option;
  while(option!=-1)
  {
    printf("==Menu==\n");
    printf("1. Area of cylinder\n");
    printf("2. Area of cone\n");
    printf("3. Area of Sphere\n");
    printf("Enter the option from menu(-1 to exit)");
    scanf("%d", &option);
    if(option==1)
    {
      printf("Enter value for radius and hight of a
              cylinder:\n");
```

```
scanf("%f %f", &radius, &hight);
surface_area = 2*(22/7)*radius*(radius
                                +hight);
volume = (22/7)*radius*radius*hight;
printf("Surface area of cylinder is : %.3f\n",
                surface_area);
printf("\n Volume of cylinder is : %.3f\n",
                volume);
}
  else if (option==2)
  {
    printf("Enter value of radius and height
                of a cone:\n");
    scanf("%f %f", &radius, &hight);
    surface_area = (22/7)*radius*
        (radius + sqrt(radius*radius +
                hight*hight));
    volume = (1.0/3)*(22/7)*radius
                *radius*hight;
    printf("Surface area of cone is : %.3f\n",
                surface_area);
    printf("\n Volume of cone is : %.3f\n", volume);
  }
  else if(option==3)
  {
    printf("\n Phase Enter the radius of a sphere\n");
    scanf("%f", &radius);
    surface_area = 4*PI*radius*radius;
    volume = (4.0/3)*PI*radius*radius*
                radius;
    printf("\n The surface area of a sphere = %.2f
                surface_area);
    printf("\n The Volume of a sphere = %.2f\n",
                volume);
  }
  return 0;
}
```