

Q.1: WAP to calculate perimeter and area of a square.

### Step-1

a=4  
perimeter=4\*a  
area=a\*a

perimeter=16  
area=16

### Step-2

int a=4;  
int p=4\*a;  
int area=a\*a;

```
//Step 3
#include <stdio.h>

int main {
    int a=4;
    int p=4*a;
    int area=a*a;
    printf("Perimeter=%d: ",p);
    printf("Area=%d: ",area);
    return 0;
}
```

```
//Step 4
#include <stdio.h>

int main {
    int side=4;
    int perimeter=4*side;
    int area=side*side;
```

```
    printf("Perimeter=%d: ",perimeter);  
    printf("Area=%d: ",area);  
    return 0;  
}
```

```
//Step 5  
#include <stdio.h>  
  
int main {  
    int side;  
    printf("Enter the side of square: ");  
    scanf("%d",&side);  
    int perimeter=4*side;  
    int area=side*side;  
    printf("Perimeter=%d: ",perimeter);  
    printf("Area=%d: ",area);  
    return 0;  
}
```

```
//Step 6  
#include <stdio.h>  
  
int main {  
  
    int side,perimeter,area;  
  
    printf("Enter the side of square: ");  
    scanf("%d",&side);  
  
    perimeter=4*side;  
    area=side*side;  
  
    printf("Perimeter of square of side %d is %d: ",side,perimeter);  
    printf("Area of square of side %d is %d: ",side,area);  
  
    return 0;  
}
```

Q.2.WAP to calculate perimeter and area of rectangle.

Step-1

$l=5$

$b=6$

$p=2*(l+b)$

$area=l*b$

$p=22$

$area=30$

Step-2

`int l=5;`

`int b=6;`

`int p=2*(l+b);`

`int area=l*b;`

```
//Step 3
#include <stdio.h>

int main {

    int l=5;
    int b=6;
    int p=2(l+b);
    int area=l*b;
    printf("perimeter=%d",p);
    printf("area=%d",area);

    return 0;
}
```

```
//Step 4
#include <stdio.h>

int main {

    int length=5;
    int breadth=6;
    int perimeter=2(length+breadth);
    int area=length*breadth;
    printf("perimeter=%d",perimeter);
    printf("area=%d",area);

    return 0;
}
```

```
//Step 5
#include <stdio.h>

int main {

    int length;
    printf("Enter the length:");
    scanf("%d",&length);
    int breadth;
    printf("Enter the breadth:");
    scanf("%d",&breadth);
    int perimeter=2(length+breadth);
    int area=length*breadth;
    printf("perimeter=%d",perimeter);
    printf("area=%d",area);

    return 0;
}
```

```
//Step 6
#include <stdio.h>

int main {

    int length,breadth,perimeter,area;

    printf("Enter the sides of rectangle: ");
```

```

scanf("%d%d",&length,&breadth);

perimeter=2(length + breadth);
area=length*breadth;

printf("Perimeter of rectangle of length %d and breadth %d is
%d",length,breadth,perimeter);
printf("Area of rectangle of length %d and breadth %d is
%d",length,breadth,area);

return 0;
}

```

Q.3.WAP to calculate the area of a circle.

**Step-1**

$r=5$   
 $a=3.14*r*r$   
 $a=78.5$

**Step-2**

`int r=5;`  
`int a=3.14*r*r;`

```

//Step 3
#include <stdio.h>

int main {

    int r=5;
    float a=3.14*r*r;
    printf("area=%d",a);
    return 0;
}

```

```
//Step 4
#include <stdio.h>

int main {

    int radius=5;
    float area=3.14*radius*radius;
    printf("area=%d",area);
    return 0;
}
```

```
//Step 5
#include <stdio.h>

int main {

    int radius;
    printf("Enter the radius: ");
    scanf("%d",&radius);
    float area=3.14*radius*radius;
    printf("area=%d",area);
    return 0;
}
```

```
//Step 6
#include <stdio.h>

int main {

    int radius;
    float area;

    printf("Enter the radius: ");
    scanf("%d",&radius);

    area=3.14*radius*radius;
    printf("Area of the circle of radius %d is %d",radius,area);
    return 0;
}
```

Q.4.WAP to calculate area of triangle by using heron's formula.

### Step-1

```
a=3
b=4
c=5
s=(a+b+c)/2
area=sqrt(s*(s-a)*(s-b)*(s-c))

s=6
area=6
```

### Step-2

```
int a=3;
int b=4;
int c=5;
float s=(a+b+c)/2;
float area=sqrt(s*(s-a)*(s-b)*(s-c));
```

```
//Step 3
#include <stdio.h>
#include <math.h>
int main {

    int a=3;
    int b=4;
    int c=5;
    float s=(a+b+c)/2;
    float area=sqrt(s*(s-a)*(s-b)*(s-c));
    printf("Area=%d",area);
    return 0;
}
```

```
//Step 4
#include <stdio.h>
#include <math.h>
int main {

    int s1=3;
    int s2=4;
    int s3=5;
    float sem_per=(s1+s2+s3)/2;
    float area=sqrt(sem_per*(sem_per-s1)*(sem_per-s2)*(sem_per-s3));
    printf("Area=%d",area);
    return 0;
}
```

```
//Step 5
#include <stdio.h>
#include <math.h>
int main {

    int s1;
    printf("Enter the side1:");
    scanf("%d",&s1);
    int s2;
    printf("Enter the side2:");
    scanf("%d",&s2);
    int s3;
    printf("Enter the side3:");
    scanf("%d",&s3);
    float sem_per=(s1+s2+s3)/2;
    float area=sqrt(sem_per*(sem_per-s1)*(sem_per-s2)*(sem_per-s3));
    printf("Area=%d",area);
    return 0;
}
```

```
//Step 6
#include <stdio.h>
#include <math.h>
int main {

    int s1,s2,s3;
    float sem_per,area;

    printf("Enter the sides of triangle: ");
    scanf("%d%d%d",&s1,&s2,&s3);
```



```

sem_per=(s1+s2+s3)/2;
area=sqrt(sem_per*(sem_per-s1)*(sem_per-s2)*(sem_per-s3));

printf("Area of the given triangle with sides %d, %d and %d is
%f",s1,s2,s3,area);
return 0;
}

```

Q.6.WAP to calculate the surface area of sphere.

Step-1

$r=4$   
 $s\_a=4*3.14*r*r$   
 $s\_a=200.96$

Step-2

$\text{int } r=4;$   
 $\text{float } s\_a=4*3.14*r*r;$

```

//Step 3
#include <stdio.h>

int main {

    int r=4;
    float s_a=4*3.14*r*r;
    printf("Surface area=%f",s_a);
    return 0;
}

```

```
//Step 4
#include <stdio.h>

int main {

    int radius=4;
    float sur_area=4*3.14*radius*radius;
    printf("Surface area=%f",sur_area);
    return 0;
}
```

```
//Step 5
#include <stdio.h>

int main {

    int radius;
    printf("Enter the radius of sphere");
    scanf("%d",&radius);
    float sur_area=4*3.14*radius*radius;
    printf("Surface area=%f",sur_area);
    return 0;
}
```

```
//Step 6
#include <stdio.h>

int main {

    int radius;
    float sur_area;
    printf("Enter the radius of sphere");
    scanf("%d",&radius);
    sur_area=4*3.14*radius*radius;
    printf("Surface area of sphere with radius %d is %f",sur_area);
    return 0;
}
```

Q.7.WAP to calculate the volume of sphere.

Step-1

$r=4$

$v=(4*3.14*r*r*r)/3$

$v=267.95$

Step-2

`int r=4;`

`float v=(4*3.14*r*r*r)/3`

```
//Step 3
#include <stdio.h>

int main(){
    int r=4;
    float v=(4*3.14*r*r*r)/3;
    printf("volume=%f",v);
    return 0;
}
```

```
//Step 4
#include <stdio.h>

int main(){

    int radius=4;
    float volume=(4*3.14*radius*radius*radius)/3;

    printf("volume=%f",volume);
    return 0;
}
```

```
//Step 5
#include <stdio.h>

int main(){

    int radius;
    printf("Enter the radius of sphere: ");
    scanf("%d",&radius);

    float volume=(4*3.14*radius*radius*radius)/3;
    printf("volume=%f",volume);

    return 0;
}
```

```
//Step 6
#include <stdio.h>

int main(){

    int radius;
    float volume;

    printf("Enter the radius of sphere: ");
    scanf("%d",&radius);

    volume=(4*3.14*radius*radius*radius)/3;
    printf("Volume of sphere with radius %d is %f",radius,volume);

    return 0;
}
```

Q.8.WAP to calculate the surface area of cube.



## Step-2

```
int a=4;  
int s=6*a*a;
```

```
//Step 3  
#include <stdio.h>  
  
int main(){  
    int a=4;  
    int s=6*a*a;  
    printf("Surface area=%d",s);  
    return 0;  
}
```

```
//Step 4  
#include <stdio.h>  
  
int main(){  
    int side=4;  
    int sur_area=6*side*side;  
    printf("Surface area=%d",sur_area);  
    return 0;  
}
```

```
//Step 5  
#include <stdio.h>  
  
int main(){  
    int side;  
  
    printf("Enter the side of cube: ");  
    scanf("%d",&side);  
  
    int sur_area=6*side*side;  
    printf("Surface area=%d",sur_area);  
  
    return 0;  
}
```

```
//Step 6
#include <stdio.h>

int main(){

    int side, sur_area;

    printf("Enter the side of cube: ");
    scanf("%d",&side);

    sur_area=6*side*side;
    printf("Surface area of cube with side %d is %d ",side,sur_area);

    return 0;
}
```