

INTRODUCTION TO FUNCTIONS IN PROGRAMMING LANGUAGE--

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FUNCTIONS

A function is a set of statements that take inputs, do some specific computation and produces output.

The idea is to put some commonly or repeatedly done task together and make a function so that instead of writing the same code again and again for different inputs, we can call the function.

Categories of FUNCTIONS

1. Function with no argument and no return value

```
main( )  
{  
_____
```

```
function1();  
_____  
}
```

```
function1()  
{  
_____
```

```
return;  
}
```

Example:

```
main()
{
    si();
    getch();
}

si()
{
    int p,r,t,s;
    Printf("\nEnter values of p,r,t:");
    Scanf("%d%d%d",&p,&r,&t);
    s = (p*r*t)/100;
    Printf("\nSimple Interest=%d",s);
    return;
}
```

Categories of FUNCTIONS

2. Function with argument and no return value

```
main( )  
  {
```

```
  int a,b;
```

```
  function1(a,b);  
  —
```

```
  }
```

```
function1(x,y)
```

```
int x,y;
```

```
{
```

```
  —  
  return;
```

```
  }
```

Example:

```
main()
{
int p,r,t;
clrscr();
Printf("\nEnter values of p,r,t:");
Scanf("%d%d%d",&p,&r,&t);
    si(p,r,t);
getch();
}

si(x,y,z)
int x, y, z;
{
int m;
m = (x*y*z)/100;
Printf("\nSimple Interest=%d",m);
return;
}
```

Categories of FUNCTIONS

3. Function with no argument and but having return value

```
main( )  
{
```

```
function1();  
——  
}
```

```
function1()  
  
{  
——  
return(v);  
}
```

Example:

```
main()
{
int s , si();
clrscr();
s=si();
Printf("\nSimple Interest=%d",s);
getch();
}
```

```
si()
{
int p , r, t ,m;
Printf("\nEnter values of p,r,t:");
Scanf("%d%d%d",&p,&r,&t);
m = (p*r*t)/100;
return(m);
}
```


Categories of FUNCTIONS

4. Function with no argument and but having return value

```
main( )  
{  
  int p,r,t,si;  
  _____  
  si=function1(p,r,t);  
  _____  
}
```

```
function1(a,b,c)  
  int a,b,c;  
  {  
  _____  
  return(z);  
  }
```

Example:

```
main()
{
int p,r,t,si,simple();
clrscr();
Printf("\nEnter values of p,r,t:");
Scanf("%d%d%d",&p,&r,&t);
si=simple(p,r,t);
Printf("\nSimple Interest=%d",si);
getch();
}
```

```
int simple(x,y,z)
int x,y,z;
{
int m;
m = (x*y*z)/100;
return(m);
}
```