In[39]:=
```
a = 0
b = 4
n = 4
y[0] = 1;
h = (b - a) / n
f[x_, y_] = x + y;
For[i = 0, i ≤ n, i++, x[i] = a + i * h;
y[i + 1] = y[i] + h * (f[x[i], y[i]]);
Print["values  at x[", i, "]=", x[i], "is ", N[y[i]]]];
```

Out[39]= 0

Out[40]= 4

Out[41]= 4

Out[43]= 1

```
values  at x[0]=0is 1.
values  at x[1]=1is 2.
values  at x[2]=2is 5.
values  at x[3]=3is 12.
values  at x[4]=4is 27.
```

In[8]:=
```
Clea
```

Out[8]= Clea

In[46]:=
```
ClearAll
```

Out[46]= ClearAll

In[47]:=
```
a = 0
b = 3
n = 2
y[0] = 5;
h = (b - a) / n
f[x_, y_] = (3 * Exp[-x]) - (0.4 * y);
For[i = 0, i ≤ n, i++, x[i] = a + i * h;
y[i + 1] = y[i] + h * (f[x[i], y[i]]);
Print["values  at x[", i, "]=", x[i], "is ", N[y[i]]]];
```

Out[47]= 0

Out[48]= 3

Out[49]= 2

Out[51]= $\frac{3}{2}$

```
values  at x[0]=0is 5.
values  at x[1]=3/2is 6.5
values  at x[2]=3is 3.60409
```

In[54]:=
```
ClearAll
```

Out[54]= ClearAll

In[55]:=
```
a = 0
b = 0.9
n = 3
y[0] = 1;
h = (b - a) / n
f[x_, y_] = x ^ 2;
For[i = 0, i ≤ n, i++, x[i] = a + i * h;
y[i + 1] = y[i] + h * (f[x[i], y[i]]);
Print["values  at x[", i, "]=", x[i], "is ", N[y[i]]]];
```

Out[55]= 0

Out[56]= 0.9

Out[57]= 3

Out[59]= 0.3

```
values  at x[0]=0.is 1.
values  at x[1]=0.3is 1.
values  at x[2]=0.6is 1.027
values  at x[3]=0.9is 1.135
```

In[62]:=
```
ClearAll
```

Out[62]=
```
ClearAll
```

In[63]:=
```
a = 0
b = 0.2
n = 2
y[0] = 1;
h = (b – a) / n
f[x_, y_] = x + y^2;
For[i = 0, i ≤ n, i++, x[i] = a + i * h;
y[i + 1] = y[i] + h * (f[x[i], y[i]]);
Print["values  at x[", i, "]=", x[i], "is ", N[y[i]]]];
```

Out[63]=
```
0
```

Out[64]=
```
0.2
```

Out[65]=
```
2
```

Out[67]=
```
0.1
```

```
values  at x[0]=0.is 1.
values  at x[1]=0.1is 1.1
values  at x[2]=0.2is 1.231
```