**Data Types**

**1-Integer:**

**Syntax:** int variable;

**Example**:

#include<iostream>

using namespace std;

int main()

{

int y=15;

cout<<y;

}

**2-Character:**

**Syntax**: char variable;

**Example**:

#include<iostream>

using namespace std;

int main()

{

char y='x';

cout<<y;

}

**3-Float:**

**Syntax**: float variable;

**Example**:

#include<iostream>

using namespace std;

int main()

{

float x=10.2;

cout<<x;

}

**Arrays**

**1-One dimensional array:**

**Syntax**: array-type array-name [size];

**Example**:

#include<iostream>

using namespace std;

int main()

{

char x[10];

for(int i=0;i<=9;i++)

{

cin>>x[i];

}

for(int i=0;i<=9;i++)

{

cout<<x[i];

}

}

**2-Two dimensional array:**

**Syntax**: array-type array-name [rows][columns];

**Example**:

#include<iostream>

using namespace std;

int main()

{

int x[3][3];

for(int i=0;i<=2;i++)

{

for(int j=0;j<=2;j++)

{

cin>>x[i][j];

}

}

for(int i=0;i<=2;i++)

{

for(int j=0;j<=2;j++)

{

cout<<x[i][j]<<" ";

}

cout<<endl;

}

}

**Loops**

**1-For Loop:**

**Syntax**: for( int variable; condition; increment)

{

Statements();

}

**Example**:

#include<iostream>

using namespace std;

int main()

{

for(int i=0;i<=6;i++)

{

cout<<i;

}

}

**2-While Loop:**

**Syntax**: while (condition)

{

Statements();

Increment;

}

**Example**:

#include<iostream>

using namespace std;

int main()

{

int i=0;

while(i<5)

{

cout<<i;

i++;

}

}

**3-Do-while Loop:**

**Syntax**: do

{

Statements();

Increment;

}

While(condition)

**Example**:

#include<iostream>

using namespace std;

int main()

{

int i=0;

do

{

cout<<i;

i++;

}

while(i<6);

}

4-**Switch statement**:

**Syntax**: switch(cast)

{

Case Cast:

Statement;

Break;

}

**Example**:

#include<iostream>

using namespace std;

int main()

{

int i=2;

switch(i)

{

case 0:

cout<<"fail";

break;

case 1:

cout<<"Pass";

break;

case 2:

cout<<"fail";

break;

}

}

**Functions**

**Syntax**: function –type function-name (parameters)

{

Statements;

}

**Example**:

#include<iostream>

using namespace std;

int addition(int x,int y)

{

return x+y;

}

int main()

{

addition(4,5);

cout<<addition(4,5);

}

**Pointers**

**Syntax**: pointer-type \*pointer-name;

**Example**:

#include<iostream>

using namespace std;

int main()

{

int \*x,y=8;

x=&y;

cout<<\*x;

}