

Computer Science - ICS Part 2 Computer Science Chapter 12 Short Questions Preparation

Q1. Write syntax of while loop, both for single statement and for multiple statement.

Ans 1: Syntax for Single Statement and Multiple Statements:

```
While (condition)
{
statements(s);
}
```

Q2. What is the output of the following code?

```
{
Int n =1;
While (n< =5);
{
Printf ("Islam Zindabad");
N= n+1;
}
Getch( );
}
```

Ans 1: Output:

```
Islam Zindabad
Islam Zindabad
Islam Zindabad
Islam Zindabad
Islam Zindabad
```

Q3. Convert the following code into while loop.

```
For (int i =1;i< =10;i ++ )
{
Printf("\nPakistan");
}
```

Ans 1: Conversion:

```
Void main ( )
{
Int i =1;
While(i< =10)
{
Printf("%\n",i);
I=i+1;
}}
```

Q4. Define for Loop.

Ans 1: For Loop: The for statement is another way of implementing loops in C. Because of its flexibility, most programmers prefer the for statement to implements loops.

Syntax: The syntax of the for loops is as follows:

```
For (initialization expression: test condition;  
increment/decrement expression)  
{  
Statement(s);  
}
```

Q5. Convert the following do-while loop in for loop.

```
Int c=2;  
Do  
Printf ("C".c);  
While (c + +< =5);
```

Ans 1: Conversion:

```
Void main ( )  
{  
Int c;  
For (c=2; c < =5; c+ +)  
{  
Printf (" %C",c);  
}  
}
```

Q6. What is sentinel controlled loop?

Ans 1: One way to do this is to instruct the user to enter a unique data value, called a sentinel value, after the last data item . The loop condition test s each data item and causes loop exit when the sentinel value is read. Choose the sentinel value is read.Choose the sentinel value carefully;
It must be a value that could not normally occur as data. The general form of a sentinel-controlled loop is;

1. Get the first line of data
2. While the sentinel value has not been encountered
3. Process the data line.
4. Get another line of data

Q7. Define While Loop.

Ans 1: The while loop keeps repeating associated statements until the specified condition becomes false. This is useful where the programmer does not know in advance how many times the loop will be traversed.The dyntax o the while statement is

```
While (condition)  
{  
statements(S);  
}
```

The condition in the while loop controls iteration. The statements which are executed when the given condition is true,from the body of the loop. If the condition is true, the body of the loop is executed . As soon as it becomes false, the loop terminates immediately.

Q8. Show output.

```
Int m;  
For (m =0; m> = 0; + +)  
Printf("%d\t",m);
```

Ans 1: Output:

0,1,2,3,4,5,6,7,8,9,.....

Q9. What is the following code in for loop.

```
Int n=1;
While (n< =10);
{
Printf("%d\n",n);
N++;
}
```

Ans 1: Conversion:

```
Void main ( )
{
Int n;
For (n=1; n< =10; n++)
Printf("%d\n",n);
}
```

Q10. Convert the following loop Code into for loop code.

```
i= 3;
Do
{
Printf ("%d/n",i);
I + =3;
}
While (i < =21);
```

Ans 1: Conversion

```
Void main
{
int i;
for (i =3; i<=21; i + =3)
printf ("%d\n",i);
}
```
