**Ghulam Ishaq Khan Institute of Engineering Sciences and Technology**

**Faculty of Computer Science and Engineering**

|  |  |
| --- | --- |
| **CS 101**  Fall 2016 Semester  **Final Examination**  Wednesday 21-12-2016  **Total Time: 3 hours**  **Total Marks:100**  **Course Instructor:**  Dr. Zahid Halim, Dr. Fawad Hussain, Engr. Dr. Ahmar Rashid, Engr. Adeel Pervez, Engr. Shahab Ansari, Engr. Zawar Hussain  Engr. Iffat Maab | Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Roll No: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Section:\_\_\_\_  Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

**You are advised to READ these notes:**

1. This paper consists of 100 MCQs.
2. Only one option is true/correct for each MCQ.
3. Attempt MCQs on the answer sheet attached, the one after this page. You MUST NOT detach it.
4. After asked to commence the exam. , please verify that you have **fourteen (14) different printed pages (back to back)** including this title page with **100** questions.
5. **The invigilator present is not supposed to answer any questions. No one may come to you for corrections and you are not supposed to request to call anyone. Make assumptions wherever required and clearly mark them.**
6. For all code segments, assume the relevant header files are already included.

Enjoy!

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Please tick (✔) the correct option only | | | | | | | | | | | | | | |
| **Question** | A | B | C | D | **Question** | A | B | C | D | **Question** | A | B | C | D |
| **1** |  |  |  |  | **36** |  |  |  |  | **71** |  |  |  |  |
| **2** |  |  |  |  | **37** |  |  |  |  | **72** |  |  |  |  |
| **3** |  |  |  |  | **38** |  |  |  |  | **73** |  |  |  |  |
| **4** |  |  |  |  | **39** |  |  |  |  | **74** |  |  |  |  |
| **5** |  |  |  |  | **40** |  |  |  |  | **75** |  |  |  |  |
| **6** |  |  |  |  | **41** |  |  |  |  | **76** |  |  |  |  |
| **7** |  |  |  |  | **42** |  |  |  |  | **77** |  |  |  |  |
| **8** |  |  |  |  | **43** |  |  |  |  | **78** |  |  |  |  |
| **9** |  |  |  |  | **44** |  |  |  |  | **79** |  |  |  |  |
| **10** |  |  |  |  | **45** |  |  |  |  | **80** |  |  |  |  |
| **11** |  |  |  |  | **46** |  |  |  |  | **81** |  |  |  |  |
| **12** |  |  |  |  | **47** |  |  |  |  | **82** |  |  |  |  |
| **13** |  |  |  |  | **48** |  |  |  |  | **83** |  |  |  |  |
| **14** |  |  |  |  | **49** |  |  |  |  | **84** |  |  |  |  |
| **15** |  |  |  |  | **50** |  |  |  |  | **85** |  |  |  |  |
| **16** |  |  |  |  | **51** |  |  |  |  | **86** |  |  |  |  |
| **17** |  |  |  |  | **52** |  |  |  |  | **87** |  |  |  |  |
| **18** |  |  |  |  | **53** |  |  |  |  | **88** |  |  |  |  |
| **19** |  |  |  |  | **54** |  |  |  |  | **89** |  |  |  |  |
| **20** |  |  |  |  | **55** |  |  |  |  | **90** |  |  |  |  |
| **21** |  |  |  |  | **56** |  |  |  |  | **91** |  |  |  |  |
| **22** |  |  |  |  | **57** |  |  |  |  | **92** |  |  |  |  |
| **23** |  |  |  |  | **58** |  |  |  |  | **93** |  |  |  |  |
| **24** |  |  |  |  | **59** |  |  |  |  | **94** |  |  |  |  |
| **25** |  |  |  |  | **60** |  |  |  |  | **95** |  |  |  |  |
| **26** |  |  |  |  | **61** |  |  |  |  | **96** |  |  |  |  |
| **27** |  |  |  |  | **62** |  |  |  |  | **97** |  |  |  |  |
| **28** |  |  |  |  | **63** |  |  |  |  | **98** |  |  |  |  |
| **29** |  |  |  |  | **64** |  |  |  |  | **99** |  |  |  |  |
| **30** |  |  |  |  | **65** |  |  |  |  | **100** |  |  |  |  |
| **31** |  |  |  |  | **66** |  |  |  |  |  |  |  |  |  |
| **32** |  |  |  |  | **67** |  |  |  |  |  |  |  |  |  |
| **33** |  |  |  |  | **68** |  |  |  |  |  |  |  |  |  |
| **34** |  |  |  |  | **69** |  |  |  |  |  |  |  |  |  |
| **35** |  |  |  |  | **70** |  |  |  |  |  |  |  |  |  |

**Q1:** What is the output of the following code?

int x=0;

while(x++ < 10)

;

cout<<x;

A. 11

B. 10

C. 9

D. 1

**Q2:** How many times does the following loop run?

int x=0;

while((x=x+2) <= 10)

x--;

A. 5

B. 4

C. 9

D. 10

**Q3:** How many times does the following loop run?

int x=0;

do {} while(x);

A. 0

B. 1

C. 2

D. Infinite loop

**Q4:** How many times does the following loop run?

int x=-1;

do {} while(x);

A. 0

B. 1

C. 2

D. Infinite loop

**Q5:** What is the output of the following code?

int x=0;

while(++x < 10)

;

cout<<x;

A. 0

B. 1

C. 10

D. 11

**Q6:** How many times does the following loop run?

int x=0, y=10;

while(x+y == 10){

x++;

y--;

}

A. 0

B. 1

C. 10

D. Infinite loop

**Q7:** How many times does the following loop run?

int x=1;

do{} while(x--);

A. 2

B. 1

C. 0

D. Infinite

**Q8:** How many times does the following loop run?

int x=10, y=1;

while(x/y)

y++;

A. 9

B. 10

C. 11

D. Infinite loop

**Q9:** What are the values of x and y computed by the following code?

int x=1, y=10;

while(x<y){

x++;

y--;

}

cout<<x<<y;

A. x=1, y=10

B. x=10, y=1

C. x=6, y=5

D. x=5, y=6

**Q10:** What is the value of x output by the following code ?

int x=1;

while(x)

x = rand()%6;

cout<<x;

A. 0

B. 1

C. 6

D. The value cannot be known.

**Q11:** How many times does the following loop run?

int x=1, y=10;

while(x<y){

y+=1;

x+=2;

}

A.10

B. 7

C. 8

D. 9

**Q12:** For what initial value of x is the following an infinite loop?

int x;

while(x)

x++;

A. 0

B. -1

Cc.c=1 is correct

1

D. None of the above.

**Q13:** For what initial value of x is the following an infinite loop?

int x;

while(x)

x = x - 1/x;

A. 0

B. 1

C. 2

D. None of the above.

**Q14:** What value of x is output by the following?

int x=1;

while(x){

if(x>=5)

break;

x++;

}

cout<<x;

A. 1

B. 2

C. 5

D. 6

**Q15:** What value of x is output by the following?

int x=1;

do{

x--;

} while(x++);

cout<<x;

A. 1

B. -1

C. 0

D. 2

**Q16:** What value of x is output by the following?

int x=-1;

do{

x++;

} while(x++);

cout<<x;

A. 1

B. -1

C. 0

D. 2

**Q17:** What is the correct output of the following code?

int array[6]={2,4,5,6,8,10};

int x = 3;

cout<<array[x + 1];

A. 8

B. 10

C. 6

D. 4

**Q18:** What is the correct output of the following code?

int array[]={1 ,4 ,5 ,7 ,8};

int x = 10, y = 4;

cout<<array[x % y];

A. 1

B. 4

C. 5

D. 8

**Q19:** What is the correct output of the following code?

int array[]={1,2,3,4};

int x = 2;

cout<<array[array[x]];

A. 1

B. 2

C. 3

D. 4

**Q20:** What is the correct output of the following code?

int a[5] = { 2, 5, 15, 20, 30 } ;

int x, y, z = 1, j = 0;

x = ++a[j];

y = a[j]--;

z = a[x--];

cout<< x<<" "<<y<<" "<<z;

A. 1 3 15

B. 2 3 20

C. 3 3 20

D. 2 2 15

**Q21:** What will be printed on the screen, as a result of the following code?

char string[]={'G','u','e','s','s','\0','w','h','a','t','\0',};

cout<<string;

A. Guess What

B. Guess

C. What

D. Guess

What

**Q22:** What will be printed on the screen, as a result of the following code?

char string[] = "Guess\nWhat's\0 Now";

cout<<string;

A. Guess\nWhat's

B. Guess\nWhat's\0 Now

C. Guess

What's

D. Guess

What's Now

**Q23:** When the following program is executed, the user enters Good Bye if prompted to enter string1, and enters See you again, if prompted for string2. What will be program output?

char string1[20] , string2[20];

cin>>string1; //The user enters "Dear Student", if pormpted to do so

cin>>string2; //The user enters "Good Luck", if pormpted to do so

cout<<string1<<"\n";

cout<<string2;

A. Dear

Student

B. Dear Student

Good Luck

C. Dear Student

D. Dear

Good

**Q24:** When the following program is executed, the user enters Good Bye if prompted to enter string1, and enters See you again, if prompted for string2. What will be program output?

int A[3] ={1};

int B[3] ={2};

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

cout<< A[i]<< " " ;

cout<<endl;

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

cout<< B[i]<< " " ;

A. 1 1 1

2 2 2

B. 1 0 0

2 0 0

C. 1 2 3

2 2 2

D. 1 0 0

2 2 2

**Q25:** What is the screen output of following code?

void ArrayOperation1( int A1, int &A2, int ArraySize ){

A1 = A1 - 1 ;

A2 = A2 + 2;

}

int main(){

int A[5]={1,2,3,4,5};

int i = 1,j = 2 ;

ArrayOperation1( A[i], A[j] , 5 );

for (i = 0; i < 5; i++ )

cout <<” ”<< A[ i ];

return 0;

}

A. 1 2 5 4 5

B. 1 1 5 4 5

C. 1 2 3 4 5

D. Error

**Q26:** What is the screen output of following code?

void FunArray1( int &b, int sizeOfArray ){

b--;

}

void main(){

int B[5]={1,2,3,4,5};

int i = 1;

FunArray1( B, 5 );

for (i = 0; i < 5; i++ ) {

cout <<” “<< B[ i ];

}

}

A. 1 2 3 4 5

B. 2 3 4 5 6

C. 1 1 3 4 5

D. Error

**Q27:** What is the screen output of following code?

void FunArray2( int b[], int sizeOfArray ){

for ( int j = 1; j <= sizeOfArray; j++ )

b[ 10-j ] = j;

}

void main(){

int b [10]={0,1,2,3,4,5,6,7,8,9};

FunArray2( b, 10 );

for (int i= 1; i <= 10; i++ )

cout <<“ “<< b[ 10 - i ];

}

A. Syntax error

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

C. 1 2 3 4 5 6 7 8 9 10

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

**Q28:** What is the screen output of following code?

void Fun( int a[], int size ) {

int temp;

for ( int iter = size - 1; iter > 0; iter-- ){

for ( int j = size - 2; j >= 0; j-- ){

if ( a[ j ] < a[ j + 1 ] ) {

temp = a[ j ];

a[ j ] = a[ j + 1 ];

a[ j + 1 ] = temp;

}

}

}

}

int main(){

int b [10]={1,4,2,6,5,8,7,10,9,11};

Fun( b, 10 );

for (int i= 0; i < 10; i++ )

cout << " "<< b[ i ];

return 0;

}

A. 11 10 9 8 7 6 5 4 3 2 1

B. 11 10 9 8 7 6 5 4 2 1

C. 1 2 4 5 6 7 8 9 10 11

D. 1 4 2 6 5 8 7 10 9 11

**Q29:** Write down the output of following code

cout<<MAT[1][1];

A. 10

B. 40

C. 50

D. None of above

**Q30:** Write down the output of following code

int main(){

int MAT[3][3]={{10,20,30},{40,50,60},{70,80,90}};

cout<<MAT(2,1);

getch();

return 0;

}

A. 40

B. 70

C. 80

D. None of above

**Q31:** Write down the output of following code

int M2D[3][3]={{1},2,3};

for (int i= 0; i < 3; i++ ){

cout<<"\n";

for (int j= 0; j < 3; j++ )

cout<<M2D[i][j]<<" ";

}

A. 1 0 0

2 0 0

3 0 0

B. 1 2 3

0 0 0

0 0 0

C. 1 2 0

3 0 0

0 0 0

D 1 0 0

2 3 0

0 0 0

**Q32:** Write down the output of following code

int A[2][2]={1,1,1,1};

int B[2][2]={2,2,2,2};

int C[2][2]={0};

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

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

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

C[i][j] += A[i][k] \* B[k][j];

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

cout<<"\n";

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

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

}

A. 1 1

1 1

B. 2 2

2 2

C. 3 3

3 3

D. 4 4

4 4

**Q33:** Write down the output of following code

int Fun1D ( int Array\_1D[], int size ){

int Total = 0;

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

Total += Array\_1D[ i ];

return Total;

}

void Fun2D(int R[3], int Array\_2D[][3],int M) {

for (int i=0; i < 3; i++)

R[i] = Fun1D(Array\_2D[i],3);

}

int main() {

int A[3][3]={{1, 2, 3},{6, 8, 9},{10, 11, 12}};

int Result[3]={0};

Fun2D(Result, A ,3 );

for (int i = 0; i < 3; i++ )

cout << Result[ i ]<<" ";

}

A. 6 23 33

B. 17 21 24

C. 1 6 10

D. 1 2 3

6 8 9

10 11 12

**Q34:** What will be output of following code?

int main(){

int x=0x9,i;

for(i=0;i<x;i+=3){

cout<<"Start ";

continue;

cout<<"End ";

}

return 0;

}

A. Start End Start

B. Start Start Start

C. End End Start

D. End Start End

**Q35:** What will be output of following code?

int main(){

static int i;

for(++i;++i;++i) {

cout<<i;

if(i==4) break;

}

return 0;

}

A. 20

B. 22

C. 24

D. 26

**Q36:** What will be output of following code?

int main(){

int i=1;

for(i=0;i=-1;i=1) {

cout<<i;

if(i!=1) break;

}

return 0;

}

A. -1

B. 0

C. 1

D. 2

**Q37:** What will be output of following code?

int main(){

for(;;) {

cout<<10;

continue;

break;

}

return 0;

}

A. Finite loop

B. 10

C. 10 10

D. Infinite loop

**Q38:** What is the output of the following code?

int a=10, \*pt;

pt=&a;

cout<<&pt;

A. Syntax Error

B. Address of a

C. Address of pt

D. 10

**Q39:** What will be output of following code?

int main(){

int i;

for(i=0;i<=5;i++);

cout<<i;

return 0;

}

A. 6

B. 5

C. 4

D. 3

**Q40:** The 3 fastest units of storage in descending order (fastest first) are?

A. register, cache, RAM

B. RAM, register, cache

C. cache, register, RAM

D. cache, RAM, register

**Q41:** What will be output of following code?

void main()

{

char cnt=0;

for(;cnt++;);

cout<<cnt;

}

A. 2

B. 1

C. 0

D. None of the above

**Q42:** What will be the output of following program?

int main()

{

int tally=0;

for(;;)

{

if(tally==10)

break;

cout<<++tally;

}

return 0;

}

A. 0 1 2 3 4 5 6 7 8 9 10

B. 0 1 2 3 ... infinite times

C. 1 2 3 4 5 6 7 8 9 10

D. 1 2 3 4 5 6 7 8 9

**Q43:** What will be the output of following program?

void main()

{

int tally;

for(tally=0;tally<10;++tally)

{

cout<<"#";

if(tally>6)

continue;

cout<<tally;

}

}

A. #0#1#2#3#4#5#6###

B. #0#1#2#3#4#5#6#7#8#9#10

C. #0#1#2#3#4#5##7#8#9#10

D. #0#1#2#3#4#5#

**Q44:** What will be the output of following program?

void main()

{

int i,j,k=1;

for(i=5;i>=1;i--)

{

for(j=0;j<i;j++)

cout<<k+j;

cout<<endl;

break;

}

}

A. 1 2 3 4 5

B. 1 2 3 4

C. 1 2 3

D. 1 2

**Q45:**  What is the output of this program?

void main()

{

int k=0;

for(k)

{

cout<<"Hello";

}

}

A. Hello

B. Nothing

C. Compile time error

D. Runtime error

**Q46:** What will be the output of the following code?

int main()

{

int num = 2, count, sum = 0;

for(count = 1; count <= num; ++count)

{

sum += count;

}

cout<<"Sum ="<< sum;

return 0;

}

A. Sum = 3

B. Sum = 2

C. Sum = 1

D. Sum = 0

**Q47:** What is the output of this program?

int main()

{

int i, n = 10;

for(i=1; i<=n; i++)

{

if(i%2!=0)

{

cout<< i;

}

}

return 0;

}

A. 1 2 3 4 5 6 7 8 9 10

B. 1 3 5 7 9

C. 2 4 6 8 10

D. 0 2 4 6 8

**Q48:**  What is the output of the following code?

int main()

{

int i = 1, j;

for ( ; ; )

{

if (i)

j = --i;

if (j < 5)

cout<<"\* "<< j++;

else

break;

}

return 0;

}

A. \*

B. \* \*

C. \* \* \*

D. \* \* \* \* \*

**Q49:**  In a for loop, if the condition is missing, then?

A. it is assumed to be present and taken to be false

B. it is assumed to be present and taken to be true

C. it result in the syntax error

D. execution will be terminated abruptly

**Q50:** How many ways of passing a parameter to a function are there in C++?

A. by value only

B. by reference only

C. by value and by reference only

D. by value, by reference, and by pointers

**Q51:** Which of the following is true of computer hardware?

A. the ALU is part of the CPU

B. the ALU is an independent component on the motherboard

C. the Control unit is part of the RAM

D. the CPU can directly read, write and store data

**Q52:** In C/C++, a function can only return ………. using the return command?

A. single variable

B. two variables

C. three variables

D. four variables

**Q53:** Why would you want to use inline functions?

A. To decrease the size of the resulting program

B. To increase the speed of the resulting program

C. To simplify the source code file

D. To remove unnecessary functions

**Q54:** Which of the following is a limit on inline functions?

A. Inline functions cannot return a value.

B. Inline functions must resturn a value.

C. Inline functions must be less than ten lines.

D. The compiler may choose to ignore an inline directive.

**Q55:** Which of the following is a valid inline for function foo?

A. inline void foo() {}

B. void foo() inline {}

C. inline:void foo() {}

D. None of the above

**Q56:** What will be the output?

inline int add(int a, int b )

{

return a+a+b+b;

}

int main()

{

int a=2,b=3;

cout<<add(a+1,b-1);

return 0;

}

A. 4

B. 5

C. 6

D. 10

**Q57:** What will be the ouput?

inline int add(int a, int b )

{

return a+b;

}

int main()

{

int a=2,b=3;

cout<<add(a++,b--);

return 0;

}

A. 4

B. 5

C. 6

D. 10

**Q58:** What is the output of the following code?

void copy (int& a, int& b, int& c)

{

a \*= 2;

b \*= 2;

c \*= 2;

}

int main ()

{

int x = 1, y = 3, z = 7;

copy (x, y, z);

cout << "x =" << x << ", y =" << y << ", z =" << z;

return 0;

}

A. x=2, y=5, z=10

B. x=2, y=4, z=5

C. x=2, y=6, z=14

D. None of the above mentioned values

**Q59:** What will be the output of the following code?

long factorial (long a)

{

if (a > 1)

return (a \* factorial (a + 1));

else

return (1);

}

int main ()

{

long num = 3;

cout<<num<<"!= " << factorial( num );

return 0;

}

A. 6

B. 24

C. Compile time error

D. Infinite recursion

**Q60:** What will be the output of the following?

int add(int a, int b);

int main()

{

int i = 5, j = 6;

cout <<3 + add(i, j)/2 + 2 << endl;

return 0;

}

int add(int a, int b )

{

int sum = a + b;

a = 8;

return a + b;

}

A. 12

B. 9

C. 10

D. 11

**Q61:** What will be the output?

int add(int a, int b )

{

int sum = a + b;

a=8; b=7;

return a + b;

}

int main()

{

int i = 5, j = 6;

cout << i + add(i, j) + j << endl;

return 0;

}

A. 22

B. 26

C. 29

D. Compile time error

**Q62:** What is the binary equivalent of 22?

A. 10110

B. 1011

C. 1111

D. 1010

**Q63:** What will be the output?

int add(int &a, const int b )

{

int sum = a + b;

a=8; b=7;

return a + b;

}

int main()

{

int i = 5, j = 6;

cout << i + add(i, j) + j << endl;

return 0;

}

A. 22

B. 26

C. 29

D. Compile time error

**Q64:** Each pass through a loop is called a/an

A. enumeration

B. iteration

C. culmination

D. pass through

**Q65:** What will be the output of following code?

int a=3;

switch(a)

{

case 1:

cout<<"1"<<endl;

case 2:

cout<<"2"<<endl;

case 3:

cout<<"3"<<endl;

default:

cout<<"4"<<endl;

}

A. 4

B. 1 2 3 4

C. 3

D. 3 4

**Q66:** Which of the following “add” functions will be called (if any) due to the following code?

int add(int a, int b) {return a+b; }

float add(int a, int b) {return a + b;}

double add(int a, int b) {return a + b; }

int main()

{

int i = 5, j = 6;

cout <<add(i, j)<< endl;

return 0;

}

A. Function at line 3

B. Function at line 4

C. Function at line 5

D. None. It will result in a compile time error

**Q67:** Which will be the output of the following code?

int add(int a, int b ) { return a + b; cout<<"int";}

float add(float a, float b ) { return a + b; cout<<"float";}

double add(double a, double b ) { return a + b; cout<<"double";}

int main()

{

double i = 5; double j = 6;

cout <<add(i, j)<< endl;

return 0;

}

A. int 11

B. float 11

C. double 11

D. 11

**Q68:** Which of the following is used to keep the value of a variable fixed to a particular initialization (i.e., should not change)?

A. static

B. const

C. absolute

D. none of the mentioned

**Q69:** What will be the output of the following?

int add(int a[], int b )

{

int sum=0;

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

{ sum+=a[i]; ++a[i];}

return sum;

}

int main()

{

int arr[2][3]={{1,0,1},{1,2,3}}; int s=3;

cout<<"First:"<<add(arr[0],s);

cout<<", Second:"<<add(arr[1],s)<<endl;

return 0;

}

A. First: 2, Second: 6

B. First: 2, Second: 5

C. First: 6, Second: 9

D. First: 6, Second: 0

**Q70:** What will be the output of the following code?

int a = 2;

int b = 0;

if (! a == b)

cout << "High";

else

cout << "Low";

A. Low

B. Syntax Error

C. High

D. HighLow

**Q71:** What is the output of following code?

int a = 1, b = 2, c=3, d, e;

d= a + b - c % b / b + (c - a) \* b;

e= d - a % b + c \* b / b + a;

cout<<d<<","<<e;

A. 7,11

B. 6,10

C. 7,10

D. 6,11

**Q72:** What is the output of following code?

int d, a = 2, b = 3;

d = a++ + ++b;

cout<<d<<" "<<a<<" "<<b;

A. 7 3 4

B. 6 3 4

C. 6 3 3

D. 7 3 3

**Q73:** What is the output of following code?

int i = 0;

int j = i++ + i;

cout<< j;

A. 0

B. 1

C. 2

D. Syntax error

**Q74:** What is the output of the following code?

int x=3, y=3;

int a= ++x + y;

int b= --x + y;

int c= --x + (++y);

int d= --x + y--;

cout<<a<<" "<<b<<" "<<c<<" "<<d;

A. 7 6 6 4

B. 6 6 6 6

C. 6 6 5 4

D. 7 6 6 5

**Q75:** What is the output of following code?

int a = 2, b = 2, c;

a = ++a; b = --b;

c = a + ++a;

cout << c;

A. 8

B. 7

C. 9

D. 6

**Q76:** What is the output of following code?

int a=7,b=6,c=3,d=4;

if ( (d<c && a>b) || (a>c) && (d < !b))

cout<<"Pass";

else

cout<<"Fail";

A. PassFail

B. Pass

C. Fail

D. Syntax Error

**Q77:** What is the output of the following code?

int a=7,b=6,c=3,d=4;

a= !a > b || c > d;

b= (b<a) && (!c>d )&& (d=!a);

cout<<a<<" "<<b<<endl;

A. 1 0

B. 0 1

C. 1 1

D. 0 0

**Q78:** What is the output of the following code?

int a = 10, b = 10;

if (a = 5)

b--;

cout<< a<<" "<<b--;

A. 10 10

B. 10 9

C. 5 9

D. 5 8

**Q79:** What is the output of the following code?

int a = !(1 && !(0 || 1));

cout<<a;

A. 0

B. 1

C. 2

D. Syntax error

**Q80:** Which of the following is the Boolean operator for logical-AND?

A. &

B. &&

C. AND

D. Not exist

**Q81:** What is the output of the following code?

int i = 2;

int i = i++ + i;

cout<< i;

A. 3

B. 4

C. 5

D. Syntax error

**Q82:** What is the output of the following code?

int a = 21;

int c ;

c = a++;

cout << c;

A. 21

B. 22

C. 23

D. Syntax error

**Q83:** What is the output of the following code?

int x=5, y=2;;

x++;

++x;

cout<<++x<<++y<<y;

A. 733

B. 723

C. 823

D. 833

**Q84:** What is the output of the following code?

int i=5;

i= ++i \* i + i - 1;

cout<<i;

A. 35

B. 41

C. 66

D. 29

**Q85:** What is the output of the following code?

int var= 10;

int main()

{

int var=80;

var-=::var;

cout<<var;

return 0;

}

A. 70

B. -70

C. 90

D. 10

**Q86:** What is the output of the following code?

int var =50;

int main()

{

int var =10;

::var+=::var;

cout<<var;

return 0;

}

A. 60

B. 100

C. 20

D. 10

**Q87:** What is the output of the following code?

int main()

{

enum NewType{Low, Medium=10, High,};

NewType var = High;

cout<< var;

return 0;

}

A. High

B. 2

C. 11

D. 3

**Q88:** What is the output of the following code?

int main()

{

enum NewType{Low, Medium=10, High,};

NewType var = 10;

cout<< var;

return 0;

}

A. 10

B. Medium

C. 1

D. Syntax Error

**Q89:** What is the output of the following code?

int fun(int b)

{

static int a =10;

a+=b;

return a;

}

int main()

{

int a =10;

int b=fun(a);

int c=fun(b);

cout<<b<<" "<<c;

return 0;

}

A. 20 40

B. 20 20

C. 40 40

D. 10 20

**Q90:** What is the output of the following code?

int b = 30;

int Fun(int a)

{

static int b = 20;

b += 2;

return b;

}

int main()

{

int b = 10;int a;

a=Fun(b);

cout<<Fun(b);

return 0;

}

A. 34

B. 22

C. 24

D. 14

**Q91:** What is the output of the following code?

void Fun2(int a) {

static int b = 20;

a += 2;

}

int main(){

int b = 10;

Fun2(b);

Fun2(b);

cout<<b;

return 0;

}

A. 10

B. 24

C. 14

D. 12

**Q92:** What is the output of the following code?

int var = -1;

void funStatic() {

var++;

}

int main(void) {

funStatic();

funStatic();

cout << ++var;

return 0;

}

A. Syntax Error

B. 2

C. Garbage Value

D. -1

**Q93:** What is the output of the following code?

int \*p= 10;

cout<<p;

A. 10

B. Syntax Error

C. 0

D. Any Random Address will be printed.

**Q94:** What is the output of the following code?

int x = 0;

int main()

{

int \*ptr = &x;

cout<< ptr<<" ";

x++;

cout<< ptr;

return 0;

}

A. Syntax Error

B. 0 0

C. Same Address will be printed twice

D. Different Addresses will be printed.

**Q95:** What is the output of the following code?

int x = 0;

int \*ptr = &0;

cout<< ptr;

A. Address of x

B. A random Address

C. Compile time error

D. Address of 0

**Q96:** What is the output of the following code?

int \*ptr, p = 5;

ptr = &p;

\*ptr += 1;

cout<<p<<" "<<\*ptr;

A. 6 6

B. 10 10

C. 5 6

D. 6 5

**Q97:** What is the output of the following code?

int i=0;

int main(void) {

for (int i=0;i<5;i++);

cout<<i;

return 0;

}

A. Syntax Error

B. 5

C. 6

D. 0

**Q98:** The 2 major classification of computer software are?

A. system software and application software

B. Windows software and open source software

C. gaming software and office software

D. programming software and GUI software

**Q99:** What is the 101010 in decimal numbers?

A. 22

B. 32

C. 42

D. 52

**Q100:**  Identify the correct screen output for the following C/C++ code (The given code has no syntax errors and assume that relevant libraries are included )

int a=0;

if (a++)

cout<<a++;

else

cout<<--a;

A. 1

B. 0

C. 2

D. None of the above option is correct