**Assignment 1**

1. Write a C program that tests whether a given character variable c is

* lower case letter
* upper case letter
* digit
* white space (includes space,tab,new line)

2. Write a C program that use bitwise AND operator to check whether a number is even or odd in C programming.

3. Write a C program to input any decimal number from user and convert it to binary number system using bitwise operator.

4. Given number “11011011”. Write a program to get the decimal value of the number if the number is in format :

* Unsigned binary
* 1’s complement
* 2’s complement

5. Using precedence rules, evaluate the following expressions and determine the value of the vari-ables(without running the code). Also rewrite them using parenthesis to make the order explicit.

* Assume ( x=10,y=2,z=2; ).Expression: z=y=x++ + ++y∗2;
* Assume ( x=10,y=4,z=1; ).Expression: y>>= x&0x2 && z

6. Output?

* What will be output of the following program?

#include<stdio.h>

int main(){

int x;

x=10,20,30;

printf("%d",x);

return 0;

}

* What will be output of the following program?

#include<stdio.h>

int main(){

int \_=5;

int \_\_=10;

int \_\_\_;

\_\_\_=\_+\_\_;

printf("%i",\_\_\_);

return 0;

}

* What will be output of the following program?

#include<stdio.h>

int main(){

int max-val=100;

int min-val=10;

int avg-val;

avg-val = max-val + min-val / 2;

printf("%d",avg-val);

return 0;

}

* What will be output of the following program?

#include<stdio.h>

#define x 5+2

int main(){

int i;

i=x\*x\*x;

printf("%d",i);

return 0;

}

* What will be output of the following program?

#include<stdio.h>

int main(){

char c=125;

c=c+10;

printf("%d",c);

return 0;

}

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1. What will be output of the following program?

#include<stdio.h>

int main(){

float a=0.7;

if(a<0.7){

printf("C");

}

else{

printf("C++");

}

return 0;

}

2. What will be output of the following program?

#include<stdio.h>

int main(){

int a=2,b=7,c=10;

c=a==b;

printf("%d",c);

return 0;

}

3. What will be output when you will execute following c code?

#define PRINT printf("Star Wars");printf(" Psycho");

#include<stdio.h>

int main(){

int x=1;

if(x--)

PRINT

else

printf("The Shawshank Redemption");

return 0;

}

4. What will be output when you will execute following c code?

#include<stdio.h>

int main(){

int const X=0;

switch(5/4/3){

case X: printf("Clinton");

break;

case X+1:printf("Gandhi");

break;

case X+2:printf("Gates");

break;

default: printf("Brown");

}

return 0;

}

5. What will be output if you will compile and execute the following c code?

#include<stdio.h>

int main(){

int i=4,x;

x=++i + ++i + ++i;

printf("%d",x);

return 0;

}

6. What will be output if you will compile and execute the following c code?

#include<stdio.h>

int main(){

int a=2;

if(a==2){

a=~a+2<<1;

printf("%d",a);

}

else{

break;

}

return 0;

}

7. What will be output if you will compile and execute the following c code?

#include<stdio.h>

int main(){

int a=10;

printf("%d %d %d",a,a++,++a);

return 0;

}

8. What will be output if you will compile and execute the following c code?

#include <stdio.h>

#include <string.h>

int main(){

int i=0;

for(;i<=2;)

printf(" %d",++i);

return 0;

}

9. What will be output if you will compile and execute the following c code?

#include<stdio.h>

#define max 5;

int main(){

int i=0;

i=max++;

printf("%d",i++);

return 0;

}

10. What will be output if you will compile and execute the following c code?

#include<stdio.h>

int main(){

printf("%d",sizeof(5.2));

return 0;

}