

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
TASK PLAN

Course Code / Course Name: 10211CS306/ COMPETITIVE CODING-1

Year / Semester : 2024-25 / SUMMER

Faculty Name : Dr.D.Prabhu

Class Slot : L13

Task1: Point out the Syntax and Semantic errors in the code snippet, and debug

1. Point out the Semantic errors in the code snippet

```
#include <stdio.h>
int main()
{
    a = 10;
    printf("The value of a is : %d", a);
    return 0;
}
```

2. Point out the Syntax errors in the code snippet:

```
#include <stdio.h>
int main()
{
    int a=2;
    if(.)

    printf("a is greater than 1");
    return 0;
}
```

3. Point out the Syntax errors in the code snippet

```
#include <stdio.h>
int main()
{
    int a=2;
    int b=2/0;
    printf("The value of b is : %d", b);
    return 0;
}
```

4. Find the output of the code

```
int main()
{
int x=1,y=5;
printf("%d",++(x+y));
return 0;
}
```

5. Find the output of the code

```
int main()
{
int a=2,b=3,c=3;
a=b==c;
printf("a=%d",a);
return 0;
}
```

6. Find the output of the code

```
int main()
{
int i=9;
for(i--;i--;i--);
printf("%d",i);
return 0;
}
```

6. Find the output of the code

```
int main()
{
int i;
for(i=5;++i;i+3)
printf("%d",i);
return 0;
}
```

Task2: Conceptual Questions in Programming

1. What is the value assigned to the variable X if b is 7.

$X = 7 > 8 ? b < 3 : 7 > 4 ? 7 > 1 : b;$

2. What will be printed by the code below?

```
int main()
{
    printf("Hi Friends"+3);
    return 0;
}
```

3. What will be printed as the result of the operation below?

```
int main()/
{
    char a=5,b=9;
    printf("%d\n",a&b);
    return 0;
}
```

4. What is the value assigned to the variable z

```
int main(void)
{
    int a=0,b=;
    if(!a)
    {
        b=!a;
    }
    if(b)
    {
        a=!b;
    }
    printf("%d %d\n",a,b);
    return 0;
}
```

5. What will be printed as the result of the operation below?

```
int main()
{
    int x=5,y=-11,a=2,b=8;
    int z=x++ - --y * b / a;
    printf("%d",z);
    return 0;
}
```

6. What will be printed as the result of the operation below?

```
int main()
{
char a=5,b=9;
printf("%d",b>>1);
return 0;
}
```

7. Find the output:

```
#include <stdio.h>
main()
{
int i;
int *pi = &i;
scanf("%d", pi);
printf("%d\n", i+5);
}
```

8. Find the output:

```
double f(double x)
{
if (abs(x*x - 3) < 0.01) return x;
else return f(x/2 + 1.5/x);
}
```

```
9.char inchar = 'A';
switch (inchar)
{
case 'A':
printf ("choice A \n");
case 'B':
printf ("choice B ");
case 'C':
case 'D':
case 'E':
default:
printf ("No Choice");
}
```

10.

What output will be generated by the given code d\segment if:

Line 1 is replaced by “auto int a = 1;”

Line 2 is replaced by “register int a = 2;”

```
int a, b, c = 0;
```

```
voidprtFun (void);
```

```
int main ()
```

```
{
```

```
static int a = 1; /* line 1 */
```

```
prtFun();
```

```
    a += 1;
```

```
prtFun();
```

```
printf ( "\n %d %d " , a, b) ;
```

```
}
```

```
voidprtFun (void)
```

```
{
```

```
staticint a = 2; /* line 2 */
```

```
int b = 1;
```

```
    a += ++b;
```

```
    printf (" \n %d %d " , a, b);
```

```
}
```