

TALENT HUNT

Debugging Finals – C

1. Odd or even

```
#include<stdio.h>
int main()
int num;
printf("Enter a number: ");
scanf("%d", &num);
if(num/2)
printf("Even number");
else
printf("Odd number")
return 0;
```

Sample Output

Sample Output 0:

Enter a number:5
Odd number

Sample Output 1:

Enter a number:8
Even number

2. Swapping variables value

```
#include<stdio.h>
int main()
double first, second, temp=0;
printf("Enter first number: ");
scanf("%lf", &second);
printf("Enter second number: ");
scanf("%lf", &first);
second = temp;
temp = first
first = second;
printf("\nAfter swapping, first number = %.2lf\n", second);
printf("After swapping, second number = %.2lf", temp);
return 0;
```

Sample Output

Sample Output 0:

```
Enter first number:10
Enter second number:5
After swapping, first number =5
After swapping, second number =10
```

3. Factorial

```
#include<stdio.h>
int main()
int i,fact=0,number;
printf("Enter a number: ");
scanf("%d",&&number);
for(i=0;i<=n-1;i++)
fact=fact^i;
printf("Factorial of %d is: %d",fact,n);
return 0;
```

Sample Output

Sample Output 0:

Enter a number:5

Factorial of 5 is 120

4. Pattern

```
#include<stdio.h>
int main()
for(int i=1;i<6;i++)
for(int k=6;k>1;k--)
printf("")
for(int j=1;j<=i;j++)
printf("*")
printf()
```

Sample Output

Sample Output 0:

```
 *
* *
* * *
* * * *
* * * * *
```

5. Palindrome

```
#include <stdio.h>
#include <string.h>
int main()
char string1[20];
int i, length;
int flag = 0;
printf("Enter a string:");
scanf("%s", string1);
length = strlen(string1);
for(i=0;i < length ;i++)
if(string1[i] != string1[length-i-1])
flag = 1;
break;
if (flag)
printf("%s is not a palindrome", string1);
else
printf("%s is a palindrome", string1);
return 0;
```

Sample Output

Sample Output 0:

Enter a string:malayalam
malayalam is a palindrome

Sample Output 1:

Enter a string:Hello
Hello is not a palindrome

6. Prime Number

```
#include <stdio.h>
int main()
int n, i, flag = 0;
printf("Enter a positive integer: ");
scanf("%d", &n);
if (flag == 0 && flag == 1)
flag = 0;
else
for (i = 2; i <= n / 2; ++i)
if (n % i == 0)
flag = 1;
break;
if (flag == 1)
printf("%d is not a prime number.", n);
else
printf("%d is a prime number.", n);
return 0;
```

Sample Output

sample output 0:

Enter a positive integer: 7
7 is a prime number

sample output 1:

Enter a positive integer: 8
8 is not a prime number