East Delta University

Department of CSE

Course Name: Compiler Design Lab

Course Code: CSE-320

Submitted To: Moumita Sen Sarma

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Submitted by:

Iftakher Hasan

Student ID: 201000322E

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Experiment Name: write a C program to test whether identifier is valid or not

Program Logic:

- Read the given input string.
- Check the initial character of the string is numerical or any special character expect '_' then print it is not a valid identifier.
- Otherwise print it as valid identifier if remaining characters of string doesn't contains any special characters expect '_'.

Program Solution:

```c
#include<stdio.h>
#include<string.h>
int main()
{       char text[40];
        int temp=1;
        int i;
        scanf("%s",&text);
         if((text[0]>='a' && text[0]<='z')
                || (text[0]>='A' && text[0]<='Z')
                || text[0]=='_')
            {
               for(i=1;i<strlen(text);i++)
                  {
                     if((text[i]>='a' && text[i]<='z')
                       || (text[i]>='A' && text[i]<='Z')
                       || text[i]=='_' || (text[i]-'0'>=0 && text[i]-'0'<=9))
                     {
                       continue;
                     }
                     else{
                         temp=0;
                         break;
                     }
                  }
            }
            else{
                printf("it is not a valid identifier ");
                exit(0);
            }
          if(temp==1)
          {
             printf("Valid identifier ");
          }else{
             printf("it is not a valid identifier ");
          }
        return 0; }
```

Input:

- **#123**
- **Hello569**

Output:

- ```
  C:\Users\Iftakher\Desktop\compiler\stringValidation.exe
  #123
  it is not a valid identifier
  Process returned 0 (0x0)   execution time : 7.000 s
  Press any key to continue.
  ```

- ```
  C:\Users\Iftakher\Desktop\compiler\stringValidation.exe
  Hello569
  Valid identifier
  Process returned 0 (0x0)    execution time : 12.599 s
  Press any key to continue.
  ```

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Signature