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| prg-1.c - Code:Blocks 20.03 | File Edit View Search Project Build Debug Fortran ws/Smith Tools Tools- Plugins DoxyBlocks Settings Help | Project Build Debug Fortran ws/Smith Tools Tools- Plugins DoxyBlocks Settings Help | Project Build Bu
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    prg.lc X
finclude <stdio.h>
void push();
void pop();
void pop();
void peek();
int Ne%;
int stack(%);
int top=1;
int main()
int ch;
                                                                                                                                                  1 2 3 4 5 6 6 7 8 9 10 11 12 13 14 15 6 17 18 19 20 1 22 2 24 25 6 27 28 9 30 31 32 33 4 35 6 37 38 9 40 41 2 43 4 44 5 66 47
      printf("Enter your choice:1(push/2(pop)/3(peek)/4(exit): \n");
sonf("%d",&ch);
switch(ch);
                                                                                                                                                                                                                               case 2:
pop();
break;
                                                                                                                                                                                                                                            case 3:
peek();
break;
                                                                                                                                                                                                                                         case 4:
    printf("Exiting....\n");
break;
                                                                                                                                                                                                                                            default:
printf("Choice is out of range");
break;
                                                                                                                                                                                                          while(ch!=4);
return 0;
                                                                                                                                                                               void push()
                                                                                                                                                                                                        int x;
printf("Enter data: ");
scanf("%d", &x);
if(top==N-1);
```

```
void push()
₽ {
     int x;
    printf("Enter data: ");
     scanf("%d", &x);
    if(top==N-1)
₽ {
       printf("Overflow,cannot enter data\n");
     else
        top++;
       stack[top]=x;
        printf("%d pushed into the stack n", x);
-}
 void pop()
□ {
     int item;
     if (top==-1)
    printf("Underflow, the stack is empty\n");
-}
else
     item=stack[top];
     printf("Popped item: %d\n",item);
-}
void peek()
if(top==-1)
        printf("Underflow \n");
else
       printf("Top item: %d",stack[top]);
```

```
Enter your choice:1(push/2(pop)/3(peek)/4(exit):
Enter data: 2
2 pushed into the stack
Enter your choice:1(push/2(pop)/3(peek)/4(exit):
Enter data: 4
4 pushed into the stack
Enter your choice:1(push/2(pop)/3(peek)/4(exit):
Enter data: 5
5 pushed into the stack
Enter your choice:1(push/2(pop)/3(peek)/4(exit):
7 pushed into the stack
Enter your choice:1(push/2(pop)/3(peek)/4(exit):
Enter data: 10
10 pushed into the stack
Enter your choice:1(push/2(pop)/3(peek)/4(exit):
Enter data: 12
Overflow,cannot enter data
Enter your choice:1(push/2(pop)/3(peek)/4(exit):
Popped item: 10
Enter your choice:1(push/2(pop)/3(peek)/4(exit):
Popped item: 7
Enter your choice:1(push/2(pop)/3(peek)/4(exit):
Popped item: 5
Enter your choice:1(push/2(pop)/3(peek)/4(exit):
Popped item: 4
Enter your choice:1(push/2(pop)/3(peek)/4(exit):
Popped item: 2
Enter your choice:1(push/2(pop)/3(peek)/4(exit):
Underflow, the stack is empty
Enter your choice:1(push/2(pop)/3(peek)/4(exit):
Underflow
Enter your choice:1(push/2(pop)/3(peek)/4(exit):
Exiting....
```