AKASH
1BM18CS008

DATE

```
void push(char c)
{
  if (top == MAX -1)
      printf("stack overflow");
   else
   {
    top++;
    stack[top]=c;
   }
}
int isoperator(char c)
{
  if (c=='^' || c=="*" ||c=="/"|| c=="+" ||c=='-')
      return1;
  else
    return0;
 }
int precedence (char c)
{
  if (c=='^")
      return 3;
  elseif (c=='*" ||c=='/")
      return 2;
  else if (c=='+' ||c =='-')
      return 1;
  else
      return 0;
}
void convert(char infix[],char postfix[])
{
  int i=0 ,j=0;
  char item, x;
  push ('(');
  strcat (infix, ")");
  item =infix [i];
```

classmate

PAGE

```
        while (item != '\0')
{
    if (item == '(')
        push (item);
    else if ( idigit (item) || isalpha (item))
    {
      postfix [j] = item ;
        j++;
    }
  else if (isoperator (item) == 1)
  {
    x = pop ();
    while (is operator (x) == 1 && precedence (x)) >= precedence(item)
    {
    postfix [j] = x;
          j++;
        x = pop();
    }
   push (x);
   push (item);
 }
 else if (item == ')')
 {
   x = pop();
   while (item != '(')
     {
       postfix (j) = x;
        j++;
       x = pop();
     }
 }
 else
 {
```

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```
    printf("Invalid expression! \n");
    exit(0);
   }
  i++;
  item = infix[i];
 }
 if (top>0)
{
  printf ("Invalid expression!!! \n");
  exit(0);
 }
 postfix[j]='\0';
}
```